DOCUMENT RESUME

ED 154 577 EC 110 324

AUTHOR Evans, Joyce S.
TITLE Ability Development Project for Five-Year-Olds. Final Report.
INSTITUTION Southwest Educational Development Lab., Austin, Tex.
SPONS AGENCY Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C.
REPORT NO 443CH50237
PUB DATE May 77
GRANT G007500592
NOTE 209p.

EDRS PRICE MF-$0.83 HC-$11.37 Plus Postage.
DESCRIPTORS Bilingual Education; Early Childhood Education; *Handicapped Children; *Instructional Materials; Kindergarten; *Mainstreaming; *Material Development; *Mexican Americans; Minority Groups; Preschool Education
IDENTIFIERS Final Reports

ABSTRACT

The final report documents activities designed to develop supplementary instructional materials for use with handicapped Mexican American pupils mainstreamed into kindergarten programs using the Bilingual Kindergarten Program as curriculum base. An initial chapter covers general project background and overview information. Chapter two reviews the development of four products: the Spanish/English Language Performance Screening, the Observational Checklists for Referral, instruction manuals, and supplementary materials. A discussion of pilot research carried out during the project's second year is provided in the third chapter, while the fourth reviews dissemination efforts. Among eight appendixes are a review of publicity information and home and media examples of supplementary materials. (CL)

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Final Report

Project No. 443CH50237
Grant No. G007500592

Ability Development Project For Five-Year-Olds

Joyce S. Evans, Ph.D.

Southwest Educational Development Laboratory

Austin, Texas

May 31, 1977

The research reported herein was performed pursuant to a grant with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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211 East 7th Street, Austin, Texas 78701

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August 9, 1977

Dr. James Hamilton
Project Officer
Research Projects Branch
Division of Innovation and Development
Bureau of Education for the Handicapped
U. S. Office of Education
400 Maryland Avenue, S. W.
Washington, D. C. 20202

Dear Dr. Hamilton:

The Southwest Educational Development Laboratory is pleased to submit a final report for "The Ability Development Project for Five-Year-Olds." Three copies of the report are enclosed together with copies of previous reports. Copies of the products completed and published by the Council for Exceptional Children and CTB/McGraw-Hill have already been forwarded to the Bureau, and a copy of the Supplementary Materials will be sent as soon as publication is completed.

The fiscal report required by the contract will be prepared in accordance with time specifications of the contract.

We are appreciative of the opportunity to assist the Bureau of Education for the Handicapped in this endeavor. If further information is required, Dr. Joyce Evans, Project Director, will be pleased to respond.

Sincerely yours,

James H. Perry

James H. Perry
Executive Director

JHP/shb

Enclosures

TABLE OF CONTENTS

ABSTRACT i
TABLE OF CONTENTS. iv
LIST OF TABLES v
CHAPTER I - INTRODUCTION 1
CHAPTER II - PRODUCT DEVELOPMENT 18
CHAPTER III - PILOT RESEARCH 68
CHAPTER IV - DISSEMINATION 107
CHAPTER V - SUMMARY STATEMENT. 112
REFERENCES 117
APPENDICES
APPENDIX A - EXTENDED STUDY OF THE S/ELPS: TEST SITES AND EXAMINERS, TESTING PROCEDURES AND RESULTS. 119
APPENDIX B - PUBLICITY INFORMATION. 137
APPENDIX C - SUPPLEMENTARY MATERIALS: ENTRY LEVEL CHECKLIST. . . 142
APPENDIX D - SUPPLEMENTARY MATERIALS: HOME ACTIVITIES. 147
APPENDIX E - SUPPLEMENTARY MATERIALS: MEDIA EXAMPLES 161
APPENDIX F - FORMATIVE FEEDBACK FROM TEACHERS AND ASSISTANT TEACHERS USING THE SUPPLEMENTARIES 164
APPENDIX G - SUPPLEMENTARY MATERIALS: CONSULTANT REVIEW 168
APPENDIX H - PROJECT DISSEMINATION MATERIALS. 172

LIST OF TABLES

TABLE NUMBER	DESCRIPTION	PAGE
CHAPTER II		
1	Summary Results: S/ELPS Reliability and Validity Studies A and B	26
2	Subject/Examiner Study	28
3	Study C: Criterion-Referenced Validity Data Study	29
4	Study C: Concurrent Validity, Test-Retest Reliability, Interrater Reliability and Intra-rater Reliability Data Summary	31
5	Frequency and Percentage of Agreement/Non-agreement Between OCR and Examiner Observations --1975 Validity Study	42
6	Frequency and Percentage of Agreement/Non-agreement Between OCR and Examiner Observations --1976 Validity Study	43
7	Comparison of Screenings, OCR, and Follow-up	46
CHAPTER III		
1	Pupil Data Collection Schedule	74
2	Teacher Background Data	77
3	Pupil Sex	81
4	Pupil Age	82
5	Pupil S/ELPS Scores: Entry Language Dominance	83
6	Observational Checklists for Referral (OCR) Data	85
7	Teacher Perception Data	86
8	Referral Data	87
9	Absence Data	88

TABLE NUMBER	DESCRIPTION	PAGE
CHAPTER III		
10	ADP Entry Level Checklist.	90
11	Norm Referenced Test Data: All Classes.	94
12	Norm Referenced Test Data Analysis Summary	95
13	Norm Referenced Test Data: Superior Class Removed.	97
14	Missing Data	98
15	Traditionally Defined Handicapped Pupils: Descriptive Information.	101

CHAPTER I

INTRODUCTION

The Ability Development Program for five-year-olds has focused on the special needs of handicapped kindergarten children enrolled in bilingual classrooms with their non-handicapped peers. The primary purpose of the Ability Development Program (ADP) was to develop and research the effectiveness of materials which would interphase with the previously developed Bilingual Kindergarten Program designed for non-handicapped children (SEDL, 1972). The development of associated assessment instrumentation and supporting materials for teachers and parents were also proposed. The ADP was funded by the Bureau of Education for the Handicapped from June, 1975 through May, 1977. The program was characterized by a developmental rather than a deficit approach to problems in learning and was directed at maximizing the learning which can occur when children of different abilities interact in the same classroom. A similar program for handicapped four-year-olds, also supported by BEH, was completed in 1973 (Evans, 1974). Products and materials designed during this earlier one-year project were further developed, tested and completed as a part of this program for five-year-olds.

During the first year of the Ability Development Program for Five-Year-Olds, Supplementary Materials for children, teachers, and parents were designed and tested. In addition research was conducted for the purposes of validating assessment instruments and materials. During the second year, the materials and assessment instruments were refined, further validation conducted and child progress over a one year period of time evaluated.

The Ability Development Program has resulted in field-validated products and research information.

The following products were completed and are now commercially available:

- The Spanish/English Language Performance Screening (S/ELPS)

  A measure of language dominance which is designed for use by the classroom teacher.

  Availability: CTB/McGraw-Hill
  Del Monte Research Park
  Monterey, California 93940

- Working With Parents of Handicapped Children

- Trabajando con los padres de niños con impedimentos

  Informational manuals for classroom teachers which focus on the feelings and attitudes of parents and teachers, designed for use by all teachers who have one or more handicapped children in their classroom.

  Availability: Council for Exceptional Children
  1920 Association Drive
  Reston, Virginia 22091

- How To Fill Your Toy Shelves Without Emptying Your Pocketbook

- Como llenar sus estantes con juguetes sin gastar mucho dinero

  Instructional manuals on how to make and use inexpensive materials within the classroom or at home.

  Availability: Council for Exceptional Children
  1920 Association Drive
  Reston, Virginia 93940

- Supplementary materials for the Bilingual Kindergarten Program

  Diagnostic and remedial materials include a teacher guide, Entry Level Checklist, Observation, Information and Action Cards, Home Activities for parents, and Supplementary Media illustrating handicapping conditions.

  Availability: National Educational Laboratory Publishers
  813 Airport
  Austin, Texas 78702

Associated research reports and papers include the following:

- Observational Checklists for Referral--Teachers and Parents Together
- Observational Checklists for Referral: Technical Report
- Spanish/English Language Performance Screening: Technical Report
- Spanish/English Language Performance Screening (S/ELPS): Extension of Reliability and Validity Studies with Cuban, Puerto Rican, and Mexican American Children, Preschool Through Third Grade

Availability: ERIC
University of Illinois at Urbana-Champaign
805 West Pennsylvania Avenue
Urbana, Illinois 61801

BACKGROUND

Initial conceptualization of the Ability Development Program was based on research that supported the need for (1) preschool intervention, (2) integration of the handicapped child within the mainstream setting, and (3) instruction of the young child in Spanish.

Rationale

The rationale for preschool intervention was based on research with non-handicapped and handicapped young children (Weikert, 1967; Karnes, 1969; Evans and Bangs, 1972; Bronfenbrenner, 1975). Integration of the handicapped with the non-handicapped learner was based on a growing body of research beginning with Bennett (1932) when higher achievement rates for retarded children within the regular classroom were found. Subsequent research, particularly in the last 10 years has shown that the handicapped child in the regular classroom progresses academically as well as or better than the handicapped child in a special class (Kirk, 1964; Rubin, et al., 1966; Smith, Kennedy, 1967; Johnson, 1969 Blatt, 1970). Other studies related to personal and social acceptance also tend to support mainstreaming, although some contradictions are evident in the literature (Sparks and Blackman, 1965; Kennedy and Bruininks, 1974; Iano, 1974).

Further supporting integration of the handicapped child, particularly the mild to moderately handicapped child, have been court decisions and opinion articles (Dunn, 1968). Education of all children within the least restrictive environment was mandated in Texas under Plan A and across the nation with the passage of Public Law 94-142, the Education of all Handicapped Children Act.

Many cases in which minority children, particularly non-English speaking children, were inappropriately tracked into Special Education classes have been documented (Calzonzit, 1971; Johnson, 1969). Court decisions also have impacted on education. In the Lau v. Nichols decision of 1974, the Supreme Court affirmed the right of children to initial instruction in their native language in order to effectively participate in the educational process. At the same time, state legislation and lower court decisions have mandated that initial instruction for the non-English speaking children be provided in their native language. This is particularly important in terms of the Southwest and Texas in particular.

In Texas, approximately 25 percent of the school population is Mexican American and many young children speak Spanish as a first or only language. In the Southwest (Arizona, California, Colorado, New Mexico, and Texas), there are more than 720,000 Mexican American children five years of age and under. No exact data exists on the number of children who (1) speak Spanish as a first language, and (2) are also handicapped. An estimate, however, can be interpolated from other available figures. Within Texas, it is estimated that some 16.1 percent of the school population is handicapped in one degree or another (Information based on figures provided by the Director of Special Education, Texas Education Agency, 1972). Of the 163,983 Spanish-surnamed three- to five-year-olds, it may be estimated that some 26,401 may have some type of handicapping condition.

Thus, legal, social, and educational changes over the past years created a critical need for materials and programs geared for handicapped children in general and for young handicapped minority children in particular. This need was particularly great for the young bilingual child. Limited instructional materials were available for preschool age Spanish speakers (Evans and Reyna, 1974) and no materials were available for the child who was also handicapped.

Development of supplementary materials for use with handicapped five-year-old Spanish speaking children was particularly relevant and needed. The previously developed Bilingual Kindergarten Program (SEDL, 1972) was adopted by the state of Texas for public school use in 1974. However, this program was designed for the non-handicapped child and no provisions were included for children with various types of disabilities or children with general problems in learning, regardless of language. However, the model and organization of the Bilingual Kindergarten Program was suited to adaptation through the addition of supplementary instructional materials.

The Bilingual Kindergarten Program

The following overview of the Bilingual Kindergarten Program model is essential in understanding the interface of the Supplementary Materials developed as a part of the Ability Development Program. A more extensive description of the program is included in Appendix A.

The Bilingual Kindergarten Program was founded on research and validated over a five year period with non-handicapped Spanish speaking children. The goals of the program are:

1. To develop the child's motor skills
2. To develop the child's language skills in both English and Spanish
3. To develop the child's thinking skills related to basic concepts
4. To assist the child in developing a positive self-concept

The major elements of the program are: Visual, Auditory, Motor, Ideas and Concepts, Syntax of English and English Vocabulary. Content for each element relates to the child's own background. All activities begin with lower level orders of skill competency and progress systematically to higher levels. Initial instruction for concept development is in Spanish so that

the child develops basic information in his or her first language before introduction to the same concept in English. Instruction begins with concrete objects, moves to pictorial representation and finally to the symbolic level. At each step, the child's ability is developed gradually through elaborating skills or learning new applications of previous skills in other contexts. In addition to curriculum activities, the Bilingual Kindergarten Programs also include Staff Development Materials, Parent Activities, a mathematical component, and dances and songs of Spanish origins.

The instructional focus of the Ability Development Program was to develop and validate Supplementary Materials to interface with the Visual, Auditory, Motor, and Ideas and Concepts elements of the Bilingual Kindergarten Program. Each of these elements include language development in both Spanish and in English throughout.

Program Objectives

Objectives of the Ability Development Program included both product development, including product validation, and research on the impact of the products within the classroom. Specific objectives were:

1. To develop and test instructional activities to supplement the Bilingual Kindergarten Program
2. To develop additional instructional guides for the classroom teacher to assist in working with handicapped children and their families
3. To develop and validate classroom assessment instruments
4. To research effectiveness of the developed products and techniques in meeting the special instructional needs of handicapped children within the mainstream setting.

The purposes of this report are to (1) describe the products and materials developed, including the process followed and field validation conducted

during the first year of the project and (2) to describe the research conducted in implementing the project on a wider scale during the second year of the project. Comprehensive reports of validation studies conducted with the two primary assessment instruments developed, the Spanish/English Language Performance Screening and the Observational Checklists for Referral, are included as separate documents and only summarized in this report.

PROGRAM OVERVIEW

The Ability Development Program (ADP) was designed to assist teachers of five-year-old Mexican American children using the Bilingual Kindergarten Program in working with those children who were also handicapped. The purpose of the ADP was the creation of Supplementary Materials which would interface with the basic Bilingual Kindergarten Program and associated general use assessment instruments and materials. The intended target group was to include only children with clearly identifiable handicapping conditions, i.e., visual loss, speech impairment, physical handicaps, learning disabilities. In reality, other children benefited from this project. Within each experimental classroom, there were children who learned easily, following the basic curriculum. Within each classroom there were also children who did not learn as well as others. Those children who were not clearly identified by professional examination as having a handicapping condition perhaps benefited most of all from the Ability Development Program. With the addition of supplementary instruction by the end of the first few months of school, these children were progressing behind the children who had no handicapping conditions. Although this group of children did not have clearly identifiable handicapping conditions, the project staff decided that it was unrealistic to exclude them from the project. Therefore the project served two groups of children: (a) those with identifiable handicapping conditions, and (b) those with non-specific handicaps but who were not learning at a typical or normal rate as compared with the fully-functioning group.

In order to develop activities for mainstreaming children within the basic bilingual program the following objectives were established and implemented:

1. To identify, develop and validate assessment instruments suitable for Mexican American children

2. To develop instructional materials for the target children; these materials were developed in the form of supplementary activities

3. To develop appropriate materials to assist teachers with minimal training in working with handicapped children

4. To develop materials for working with parents of preschool handicapped children

5. To identify target children and implement supplementary instruction to research the effectiveness of the materials in assisting children in learning

The procedures followed to meet these objectives are summarized below by program year and discussed in detail in the following sections.

First Year Overview

During the first year of the project, primary focus was on the design and on the initial design testing of materials and assessment instruments on a limited basis under direct supervision of the project staff. In order to work directly with the teachers and their children, day care centers serving five-year-old children were selected in Austin, Texas. This included two classrooms of five-year-old children in an integrated setting, i.e., Mexican American, Black and Anglo children in which the Bilingual Kindergarten Program was used, and four kindergarten classrooms in the Edgewood Independent School District, San Antonio, Texas. In the Edgewood site all children were Mexican American. No attempt was made to select or place handicapped children within the San Antonio classes. However, within the Austin Day Care Center when Mexican American children with problems were identified at other centers, they were transferred to the project center.

All teachers were trained in implementation of the basic program by an experienced SEDL training specialist. The teachers also received in-service

training in implementation of the basic curriculum as well as implementation of the Supplementary Materials and use of the assessment instruments. During this year the primary goal was to design the Supplementary Materials and assessment instruments and to collect formative evaluation data in order to revise them for more extensive testing the second year.

During the first year of the project, validation of the Spanish/English Language Performance Screening was conducted with five-year-old children. Also, a validation study of another assessment instrument, the Observational Checklists for Referral was conducted. Revisions of the following teacher training manuals were completed: Working with Parents of Handicapped Children; Trabajando con los padres de niños con impedimentos; How To Fill Your Toy Shelves Without Emptying Your Pocketbook; Como llenar sus estantes con juguetes sin gastar mucho dinero. These manuals had been initially designed but not completed under a previous grant. These instructional manuals and the S/ELPS were submitted to publishers following USOE procedures for commercial publication and dissemination.

Thus, at the end of the first year of the project two assessment instruments had been field-validated, Supplementary Materials had been designed, tested, and revised; and English and Spanish versions of two training manuals were completed. In addition, classroom teachers were trained, and ready to move into implementation of the Supplementary Materials during the second year of the program.

Second Year Overview

During the second year of the program, two classrooms in the Austin Day Care Centers were initially included as well as six classrooms in the Edgewood Independent School District. The project staff continued to work with

the Austin day care centers during the second year of the project. However, the student turnover rate was so high that the data collected on the children were insufficient for analysis in the final report. A major problem was that free public school kindergarten had become available to all children. Consequently, many parents removed their children from the day care center and enrolled them in the public schools. Another problem was that of a change in the income level requirements for free day care services. Many children had to be withdrawn from the center because their families were "over income". Therefore, within a period of nine months there was a turnover of approximately 75 per cent in these classes. The data from these groups were insufficient.

In the Edgewood school district five classes were originally included in September, 1976. Two classes were designated as "control classes," classes in which the basic curriculum Bilingual Kindergarten Program was used and no Supplementary Materials were implemented. In four classes the Supplementary Materials were used in addition to the Bilingual Kindergarten Program. In one class only initial data were completed. The classroom teacher did not consistently report information on the children. These data were also insufficient for final analysis.

The data reported for the second year of the program were based on a comparison of the data from four classrooms, one control classroom and three experimental classrooms in which the Supplementary Materials were used.

Results

The first objective of the project was to identify and/or develop appropriate assessment instruments. In order to determine whether to test children in English or in Spanish, it was first necessary to develop a means of quickly determining the child's dominant or preferred language. There-

fore, the Spanish/English Language Performance Screening (S/ELPS) was validated with five-year-old children to meet this need. The S/ELPS is designed to be administered and scored in less than 15 minutes by any bilingual person and used as a guide in teaching children a new language or in grouping children for classroom activities. Development of the S/ELPS is described elsewhere and a summary is included in the following section.

In order to assist project teachers in identifying children with possible problems, and to provide the teachers with a basis for referring children, the Observational Checklists for Referral (OCR) were developed and validated. The OCR is a checklist type screening instrument consisting of an instructional guide, one general and seven specific checklists in the area of Health, Vision, Hearing, Speech, Motor, Behavior, and Learning. The OCR is designed to aid teachers in identifying children who should be referred to other professionals. The OCR was administered to all project children during the pretesting period. The development of the Observational Checklists for Referral is also described elsewhere and a summary is included in the following section.

In order to assess entry level abilities of the children a criterion-referenced pretest from the basic bilingual program was administered to all children. In addition, an Entry Level Checklist was developed and utilized in the project classrooms.

Therefore, the first objective was met through the development of the Spanish/English Language Performance Screening, the Observational Checklists for Referral, and the Entry Level Checklist.

The second objective was to develop instructional materials for classroom use to supplement the basic program. Design and initial testing of the

Supplementary Materials began during the first year of the program. Formative feedback was obtained from day care and public school classroom teachers of five-year-olds. This feedback data and reviews by external consultants were followed in revising the materials during the summer of 1976.

These materials provided a means of identifying needs and individualizing instruction for the handicapped child within the regular Bilingual Kindergarten Program. The Supplementary Materials include:

Instructional Guide - Instructions on how to use the Supplementary Materials.

Observation Cards - For use in identifying specific behaviors in the Visual, Auditory, Motor, and Ideas and Concepts lessons and to provide immediate techniques for simplifying the task or determining where skills break down.

Information Cards - Provide general information, ways of handling problems, suggestions for classroom management, and specific information on different types of handicapping conditions.

Action Cards - Provide alternate ways of teaching a task or smaller step activities for meeting and reinforcing lesson objectives.

A third objective of the project was to develop materials to help teachers in working with handicapped children within the regular classroom. In addition to the instructional manuals which accompany the S/ELPS, and the Supplementary Materials, two instructional manuals, Working with Parents of Handicapped Children and How To Fill Your Toy Shelves Without Emptying Your Pocketbook, were completed and submitted for publication by the Council for Exceptional Children. These manuals, each of which is written in Spanish as well as English, are briefly described in the following sections.

The fourth objective of the program was to develop instructional activities for parents to use at home with their children. A series of activities were designed and reviewed by parents of handicapped children. These activities were then revised and tested on a limited basis during the

second year of the project. These parent activities are designed to accompany the Supplementary Materials.

In addition to written materials, training filmstrips have also been developed. One of these, "The Ability Development Project for Five-Year-Olds," provides an overview description of the total project and how the various materials, strategies for instruction and activities interface with one another. The overview filmstrip has been used for presenting information on the Ability Development Program as well as for preparation of teachers in initial implementation of the program. A second filmstrip, "The Observational Checklists for Referral," was originally designed as a training film for teachers planning to use the checklists. It has also been used as an overview presentation for various professional groups.

An unstated goal of the project staff was to complete products and place them in the field as quickly as possible. Dissemination of information on the program occurred throughout the project period. No direct effort was made to advertise product availability as the products were only available for limited use by test site teachers. Awareness of the products, however, evolved from professional presentations and through word of mouth. A number of requests were received for the various products throughout the project period. Figures and discussions on requests received are included in the section titled "Dissemination."

The number of requests created a problem for the project staff. A great deal of staff time and project money were expended in responding to letters of request. Funds for massive or extended publication and dissemination of materials, particularly of training manuals, were not included in the project budget. After the original limited number of copies (approximately 100 of each manual) had been distributed to project teachers and other involved persons, the remaining copies were distributed free of charge. At that point, it became

quite obvious that continuing reproduction and dissemination without cost reimbursement was not feabible. During the last year of the project, field versions of the manuals were reprinted and actual printing costs charged to those requesting copies, with the provision that formative evaluation be provided to the staff. Commercial publishers were solicited as soon as the products were ready for publication. The S/ELPS became commercially available through McGraw-Hill in the Fall of 1976. Four training manuals were published by the Council for Exceptional Children from November, 1976 through February, 1977.

McGraw-Hill received numerous requests for use of the S/ELPS with older children as well as with Puerto Rican and Cuban children. To meet the public demand, McGraw-Hill contracted with the project staff for validation of the S/ELPS with kindergarten through third grade children of Puerto Rican, Cuban, and Mexican American families. This validation study was completed in the spring of 1977.

In summary, this project has resulted in (1) development and validation of products which are already in commercial distribution, (2) research on the progress made by handicapped children when provided supplementary instruction, and (3) direct services, in terms of teacher training as well as child instruction. Twenty-four teachers and assistant teachers have participated in training over the two year period. Two hundred forty children, some of whom were thought to be handicapped, have also received services as a direct result of this project.

This project's scope of work includes research, development, and service. Therefore, the remainder of this report is divided into two primary sections: (1) product development and (2) research. In the section on product development, the products, methodology used in developing these products, subjects,

and the results are described for the Supplementary Materials, the Spanish/English Language Performance Screening, and the Observational Checklists for Referral. The second section, titled Pilot Research, describes the results of utilizing these products and a comparison of child progress. Three strategies are employed for reporting this information--descriptive, statistical and case study.

CHAPTER II

PRODUCT DEVELOPMENT

INTRODUCTION

This chapter provides a description of the main accomplishment of the Ability Development Project--the development of products useful to the classroom teacher with little background in special education for working with mild to moderately handicapped mainstreamed Mexican American pupils in a bilingual kindergarten program. Four products are are discussed: (1) The Spanish/English Language Performance Screening (S/ELPS), (2) The Observational Checklists for Referral (OCR), (3) Instruction Manuals, and (4) Supplementary Materials. As appropriate, each section provides background information, details of the developmental process, analysis of formative data, final description, and dissemination statistics and plans for each of the products.

THE SPANISH/ENGLISH LANGUAGE PERFORMANCE SCREENING (S/ELPS)

Introduction

The Spanish/English Language Performance Screening (S/ELPS) was conceptualized and designed as a part of "A Project to Develop Curriculum for Four-Year-Old Handicapped Mexican American Children" (Grant OEG-0-074-0550) and was completed under the current project for five-year-olds.

In 1976 the S/ELPS was submitted for a commercial publisher bid through Publishers Alert and the U. S. Office of Education, It was published by CTB/McGraw-Hill, Monterey, California in late fall, 1976. To extend the usefulness of the S/ELPS, CTB/McGraw-Hill supported additional research with Cuban, Puerto Rican and Mexican American children through third grade; these studies were completed in Spring, 1977.

Only summary information on the S/ELPS and the completed research is included in this report as detailed reports are available in the following ERIC documents:

1. Evans, J. S. A Project to Develop Curriculum for Four-Year-Old Handicapped Mexican American Children, Final Report, Bureau of Education for the Handicapped, Project No. H 33-3640, November, 1974.

   (includes information and data on initial design and research conducted with four-year-old Mexican American children in Texas)

2. Evans, J. S. Technical Report: Spanish/English Language Performance Screening. Project No. 443 CH 50237, Grant No. G00-75-00592, March, 1976.

   (includes data on research conducted with five-year-old Mexican American children in Texas)

3. Evans, J. S., Butler, J., Schmidt, J., and Zuniga, B. The Spanish/English Language Performance Screening: Extension of Reliability and Validity

Studies with Cuban, Puerto Rican, and Mexican American Children, Pre-School through Third Grade. Submitted to ERIC in July, 1977.

(includes brief summary of earlier studies and data on extended studies as indicated by the title)

A summary of the first two reports is also included in Section F: Technical Information, of the Examiners Handbook, Spanish/English Language Performance Screening, CTB/McGraw-Hill, Monterey, California, 1976.

Instrument Overview

The Spanish/English Language Performance Screening (S/ELPS) is an oral language test designed to assist the classroom teacher in objectively determining each child's stronger or dominant language for initial instruction. The S/ELPS may also be used to identify a child's dominant language prior to administration of other tests or for assessing changes in oral language performance.

The S/ELPS was developed as a method of comparing the Spanish versus English oral receptive and expressive language performance of children whose home language may be Spanish. It does not compare the performance of one child with that of another and is not a competitive test. Neither is the S/ELPS an "intelligence" test or a measure of academic achievement, i.e., reading ability. The purpose of the S/ELPS is to obtain consistent, objective samples of the child's oral performance in each language and to compare the quality and quantity of Spanish and English responses in order to determine the child's preferred or dominant language. The Spanish and English parts consist of parallel items which have been tested for equivalency. This is in contrast to many tests which have identical or translated forms.

Description

The S/ELPS administration kit includes the following materials:

Manual - includes all directions for administering the S/ELPS, instructions for assigning language categories, sample case studies, guidelines for using the S/ELPS language categories for instructional grouping, and technical information.

Manipulatives - two boxes of the following miniature objects:
Box 1 (Spanish portion) cup, plate, spoon, comb, mirror, watch
Box 2 (English portion) baby, bottle, bed, chair, table, scissors

Pictures - 8 x 10 color pictures to elicit oral descriptions, illustrating familiar scenes.

Spanish and English record forms - the forms include stimulus questions and a summary classification table, as well as space for recording responses.

The S/ELPS test consists of two parts. Part I, the Spanish section (administered first), and Part II, the English section (administered second). Each section follows the same five-step sequence of questions and presentation of materials, as follows:

1. Simple familiar questions such as, "¿Cómo te llamas?" or "How old are you?" are asked to put the child at ease and establish the language set.
2. Naming of miniature objects familiar to young children (Spanish - cup, plate, spoon, comb, mirror, watch; English - bottle, bed, baby, table, chair, scissors)
3. Following simple directions using the above mentioned objects, such as "Pon el reloj en la caja" or "Put the scissors in the box."
4. Describing the objects or their use.
5. Describing pictures of familiar scenes. For the Spanish part, these are pictures of a mother and two children bathing and of a piñata birthday party. For the English part, these are pictures of a play-

ground scene and of a father and two children at a circus.

Language Categories

Responses to the Spanish portion and to the English portion are rated and then compared to obtain a category rating. These ratings are:

Category 1 - Spanish: The child speaks only Spanish and little or no English.

Category 2 - Predominantly Spanish: The child speaks Spanish as the stronger or dominant language, but can also communicate to a limited extent in English.

Category 3 - Bilingual: The child speaks both English and Spanish. The child may speak the two languages separately or may blend both languages.

Category 4 - Predominantly English: The child speaks English as the stronger or dominant language, but can also communicate to some extent in Spanish.

Category 5 - English: The child speaks only English and little or no Spanish.

Category 0 - Unclassified: The S/ELPS does not yield a sufficient sample of the child's language on which to base a determination of which language is stronger for children who do not respond in either language or for whom an insufficient language sample is obtained.

Theoretical and Conceptual Background

Initial development of the S/ELPS was based on Piagetian concepts, an information-processing model,[1, 2] and clinical experience. It was designed to sample receptive, inner, and expressive language abilities of young children, to move from the concrete to the slightly more abstract, and to move from direct child focus to a more general focus. Receptive and inner

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1. Osgood, C. E. "A Behavioristic Analysis," in Contemporary Approaches to Cognition. Cambridge, Massachusetts: Harvard University Press, 1957.

2. Osgood, C. E. "Motivational Dynamics of Language Behavior," in Nebraska Symposium on Motivation. Lincoln, Nebraska: University of Nebraska Press, 1957.

language is assessed by observing the way in which the child attends to and processes information or instructions in responding to directions and simple questions throughout the test. At the non-verbal level, inner language is inferred by the child's manipulation of related objects in a meaningful way. Each set of objects includes a group of three related objects (cup, plate, spoon or baby, bottle, bed), two related objects (comb, mirror or table, chair) and an unrelated object (watch or scissors). Expressive oral language is assessed through the way in which the child labels and describes objects. Initial parts of the test focus directly on the child through asking questions of direct relevance to the child. Toy replicas of familiar objects are used for manipulation, naming, following directions, and describing. In the final section, pictures, which are a more abstract representation, are used to elicit oral expression.

Item Selection

In development of the S/ELPS, the following criteria were applied in selection of items:

1. The tasks presented should be well within the developmental capacities of young children. Thus, the child's performance on an item would depend on the ability to understand and use language rather than upon intellectual ability.
2. The screening should include similar, but not identical items in English and in Spanish.
3. The items were to sample a variety of language activities (Answering Questions, Naming Objects, Following Directions, Describing Objects, and Describing Pictures).

4. The items were to be interesting and enjoyable enough to stimulate the child to speak freely and at some length.

In selecting the toy objects, 58 Mexican American four- and five-year-old children were presented with a pool of 35 familiar objects which were under consideration for inclusion in the test. The children were then asked to name each of the objects. Those objects that were given inconsistent labels and objects that were labeled with three or more different identifiers were not included in the test. A total of twelve objects were selected for inclusion in the first version of the S/ELPS; six of the 12 objects were included in the English part of the test and the other six were included in the Spanish part of the test.

The method used to select pictures for inclusion in the S/ELPS was similar to that used in selecting objects. The same group of 58 children who participated in the object selection study were also asked to respond to a pool of eight pictures illustrating familiar scenes within the home and school. The children were asked to describe the pictures and their responses were recorded. Those pictures that received little or no response were eliminated. Six pictures were initially selected for the design version of the S/ELPS. The number of pictures was reduced to four (two for the Spanish part and two for the English part) after this phase of development because children gave sufficient spontaneous verbalization to four pictures. Length of administration time and ultimate cost could thus be reduced without loss in accuracy. The four pictures selected for inclusion were those that produced the most lengthy responses in both languages. For the Spanish part, these pictures were scenes of two children and a mother drying one of the children in a bathroom and a group of children playing with a piñata. Based on the recommendations of examiners and classroom teachers during the design

test phase of development, a birthday cake was added to the piñata scene. For the English part, one scene was of children playing on outdoor play equipment and the second scene contained a father and two children, a clown and balloons.

Formative Research Regarding Reliability and Validity

Following object and picture selection, the S/ELPS was reviewed for face validity, the initial version was administered by classroom teachers in day care centers, formative evaluation was obtained, and validation studies were conducted. The S/ELPS was field tested and validated with four- and five-year-old children enrolled in day care centers and public school kindergartens in Texas. More than 500 children and 25 examiners participated in the various aspects of these research studies. Results and findings of these two studies are detailed in the reports listed on page 19 and summarized in the following table (Table 1).

Extended Research Regarding Reliability and Validity

On the basis of the above studies, the S/ELPS was confirmed as a valid and reliable measure of the dominant language of four- and five-year-old Mexican American children in Texas. Following U. S. Office of Education guidelines, the S/ELPS was submitted through the Bureau of Education for the Handicapped for bids from commercial publishers. Announcements of the availability of the S/ELPS for publication were sent out to commercial publishers through Publishers Alert and CTB/McGraw-Hill received the contract. The S/ELPS kit was prepared and became available commercially from CTB/McGraw-

Table 1

Summary Results: S/ELPS Reliability and Validity Studies A & B

N	Age	Origin	Location	Test	Pearson Correlation
			Study A		
30	4 yr.	Mex. Amer.	Texas	Criterion Validity*	.86
30	4 yr.	Mex. Amer.	Texas	Test-Retest Reliability	.93
30	4 yr.	Mex. Amer.	Texas	Interrater Reliability	.99
14	4 yr.	Mex. Amer.	Texas	Intrarater Reliability+	.99
			Study B		
223	Preschool/ Kind.	Mex. Amer.	Texas	Criterion Validity *	.85
81	Preschool/ Kind.	Mex. Amer.	Texas	Test-Retest Reliability	.88

* S/ELPS scores compared to teachers' ratings of language dominance

\+ Procedure: Rescore of tape recorded second test administration by person performing first test administration.

Hill, Monterey, California, in the Fall of 1976.

Recognizing the need for additional data on the S/ELPS regarding usability with other Spanish-speaking groups and with children in the early elementary grades, CTB/McGraw-Hill provided the financial support for a third study of validity and reliability. Thus, during the period of September, 1976 through February, 1977, the S/ELPS was administered to kindergarten through third grade Mexican American, Cuban and Puerto Rican children in order to determine the reliability and validity of the S/ELPS for use with a wider population than had been previously tested. Thirty-five examiners tested 742 students in Arizona, California, Florida, Pennsylvania, and Texas in an effort to further specify the criterion and concurrent validity of the S/ELPS as well as the test-retest, interrater, interscorer and intrarater reliability of the instrument. Table 2 contains a Subject/Examiner Summary.

The results of this extended study are described briefly in this section while a more complete description of test sites and examiners, testing procedure and results is found in Appendix A.

Criterion-related validity. Table 3 presents the correlations obtained between S/ELPS scores and teacher classifications of language dominance (used as criterion) by grade level, by Spanish language subgroup, and by site. The resulting validity coefficients range from a high of .96 for Mexican American kindergarten pupils in Arizona to a low of .41 for Mexican American third grade pupils in Texas. Correlations were generally highest for younger pupils (e.g., kindergarten through second grade). Coefficients for both Mexican American and Cuban pupils were also more than adequate. Data collection problems, discussed further in the appendix, precluded obtaining comparable validity coefficients for Puerto Rican pupils. Other analyses, also discussed

Table 2

Subject/Examiner Summary

Origin	Site	Number of Children	Grade Levels	Examiners	Test Conditions	Date of Testing
Mexican American	School District A School District B (concurrent validity) San Antonio, Texas	145 53 198	1-3	Classroom teachers, assistants, and SEDL staff	Child's classroom and hallway	Sept. 76
	Yuma, Arizona	93	K-3	Assistant teachers unknown to children	School cafeteria and vacant classrooms	Oct. 76
	San Diego, California	166	K-3	Students of the U. S. International University	Child's classroom and vacant vacant classrooms	Dec. 76
Cuban	Miami, Florida	84	K-3	Resource teachers and parents with limited familiarity with children	Outside child's classroom and school cafeteria	Oct. 76
Puerto Rican	Bethlehem, Pennsylvania	201	K-3	Teachers unknown to children	Resource rooms	Jan. 77

Table 3

Study C:

Criterion-Referenced Validity Data Summary

Location	Pupil Origin	Kindergarten		Grade 1		Grade 2		Grade 3		Total	
		N	Corr.	N	Corr.	N	Corr.	N	Corr.	N	Corr.
Texas	Mexican Amer.	---	---	47	.88	48	.71	50	.41	145	.73
Arizona	Mexican Amer.	40	.96	18	.59	35	.82	---	---	93	.87
California	Mexican Amer.	43	.79	40	.77	42	.43	41	.56	166	.68
Tx, Ariz, Cal	All Mex Amer.	83	.93	105	.84	125	.81	91	.51	404	.82
Florida	Cuban	21	.84	18	.90	19	.93	26	.66	84	.83
Tx, Ariz, Cal, Fla	All Mex Amer. and Cuban	104	.92	123	.84	144	.82	117	.51	488	.83
Pennsylvania	Puerto Rican	30	.50	65	.69	52	.70	54	.45	201	.64

Note: All correlations are between teacher ratings and S/ELPS scores of pupil language dominance; Puerto Rican data is kept separate because different teacher rating criteria were employed. Pearson's product moment correlations are reported.

further in the appendix and later in this chapter, indicated site-related factors to be affecting results.

Concurrent Validity. Concurrent validity was evaluated by comparing performance on the S/ELPS with performance on the James Test of Language Dominance. Approximately equal numbers of students from each grade level participated. Person's product moment correlations were computed to determine the degree of agreement between S/ELPS and James scores. This analysis yielded a validity coefficient across all grade levels of .86. These results indicate a high degree of concurrent validity when comparing the results of the S/ELPS to that of the James. Table 4 contains a summary of this data.

Test-Retest Reliability. Test-retest reliability of the S/ELPS was determined by readministering the S/ELPS to a sub-sample of students at each grade level at each test site (Total N = 326). Students were retested from one to three days following the first test administration. Although students were retested under conditions similar to those in the first test administration, in approximately half of the cases, a different examiner retested the student. A Pearson's product moment correlation was performed comparing the scores of the first test administration to those obtained on the second administration. The results of this analysis yielded a reliability coefficient of .84. Summarization of this data is also found in Table 4 .

Interrater and Interscorer Reliability. In order to determine the consistency of the S/ELPS scores between different examiners, two methods were employed: First, two examiners tested the same child on two separate occasions (N = 153). Additionally, the test protocols of a sample of 5 subjects at each grade level from each test site were rescored by a different examiner (total N = 90).

Table 4

Study C: Concurrent Validity, Test-Retest Reliability

Interrater Reliability and Intrarater Reliability Data Summary

Test	N	Origin	Grade Level	Pearson Correlation
Concurrent Validity*	53	Mexican American	K-3rd	.86
Test-Retest Reliability	326	Mexican American Puerto Rican, Cuban	K-3rd	.84
Interrater Reliability	153	Mexican American Puerto Rican, Cuban	K-3rd	.87
Interscorer Reliability	90	Mexican American Puerto Rican, Cuban	K-3rd	.97
Intrarater Reliability	173	Mexican American Puerto Rican, Cuban	K-3rd	.81

*comparison of S/ELPS with James Test of Language Dominance

Pearson's product moment correlations were computed to measure the degree of agreement between the two test scores for each student when tested by different examiners. This analysis yielded a reliability coefficient of .87. A Pearson's product moment correlation was also used to determine the degree of agreement between the test scores and the scores obtained upon rescoring. This analysis yielded a reliability coefficient of .97. A summary of the correlational data obtained in this part of the study is also found in Table 4.

Intrarater Reliability. A sub-sample of 173 subjects were retested on two occasions by the same examiner. Subjects from each grade level at each test site were retested in this condition one to two days following the first administration of the S/ELPS. A Pearson's product moment correlation was employed to determine the degree of agreement between the two S/ELPS scores for each individual. This analysis yielded a reliability coefficient of .81. Table 5 includes a summary of these findings. The difference between the correlation coefficients for retest data for same examiner ($r = .81$) versus that retest data for different examiner ($r = .87$) was analyzed to determine if the difference between coefficients was significant. The results of this test indicated that the difference between the correlation coefficients was not significant.

Summary and Discussion

Generally, it can be stated that sound methods of test development were employed and recorded, leading to the creation of an instrument which met well its objective of providing a brief, easy-to-administer test of oral language dominance (Spanish/English) for use by the classroom teacher. The three studies completed to date indicate adequate to high levels of criterion-

related validity, concurrent validity, test-retest reliability, interrater reliability, interscorer reliability and intrarater reliability for use of the S/ELPS with Mexican American, Puerto Rican and Cuban children, preschool through third grade.

Further review of the findings suggests that there is an apparent correlation between the number of children tested per day per examiner and the criterion-related validity coefficients at each site (See Figure 2). It seems plausible that when examiners are required to test large numbers of children quickly, less valid results are obtained. It also seems likely that when examiners felt under a time pressure they spent less time testing the students. In addition, the examiners may not have conducted the testing in as thorough a manner as in test sites where only a few children were tested. The primary implication is that testing should be conducted at a relaxed pace, allowing at least 15 minutes per test administration. Testing of entire classrooms should be extended over a two to three day period, rather than attempting to test all children within a single day. Following these procedures should increase the probability of getting valid appraisals of the students' oral language abilities with the S/ELPS. Needless to say, these findings have implications for the administration of other tests to large numbers of children.

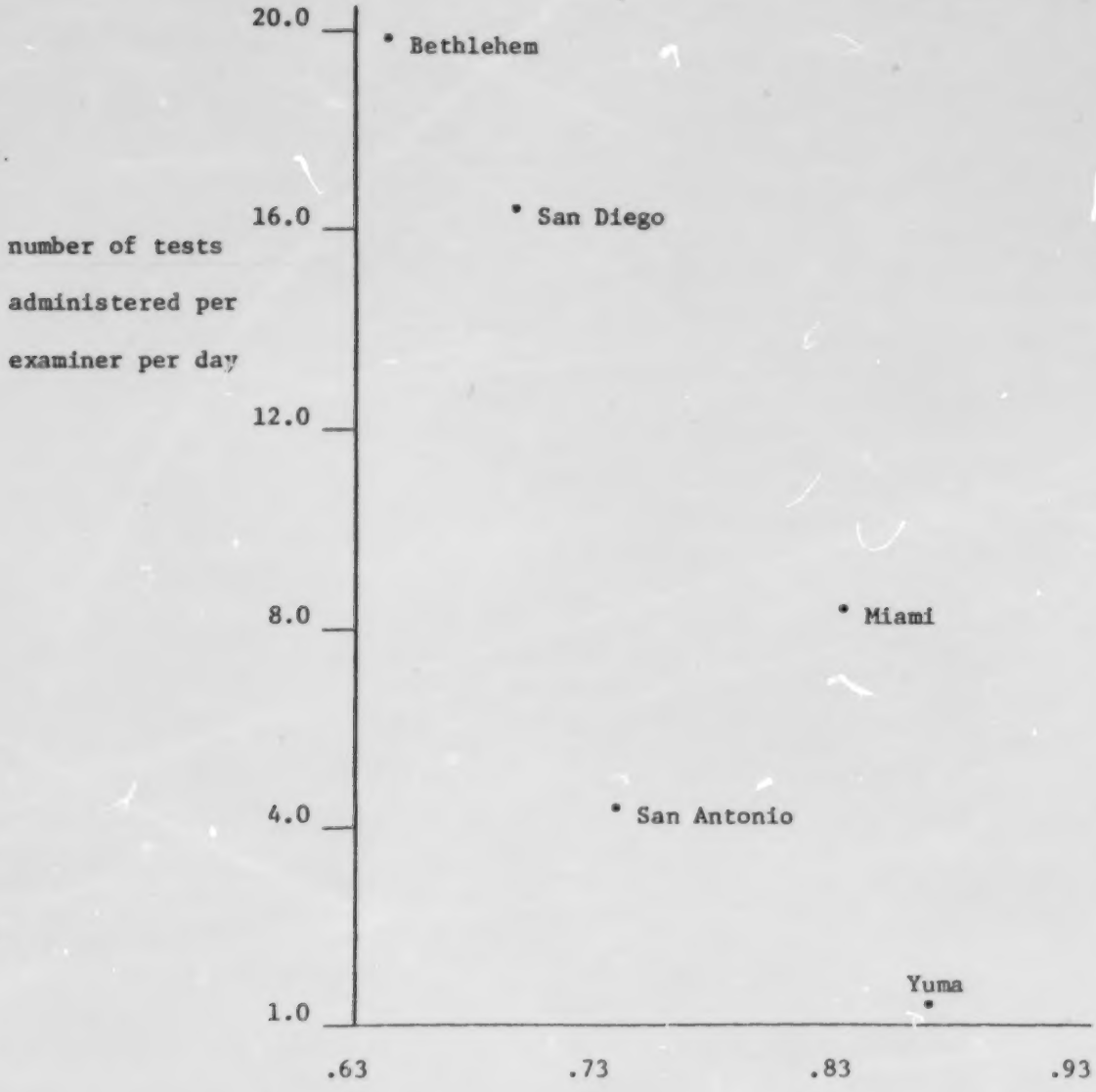
Dissemination

From the expanded testing made possible as part of the Ability Development Project, and by studies made possible by McGraw-Hill, the S/ELPS has been included on a list of tests recommended for use in Texas by the Bilingual Division of the Texas Education Agency. Additionally, the S/ELPS is presently

Figure 1

Study C:

The relationship between criterion-related validity coefficients vs. number of tests administered per examiner per day by test site.



being used in all kindergarten programs in the Edgewood Independent School District (San Antonio, Texas), and is being considered for use in preschool programs in other cities.

The S/ELPS became available for purchase in September, 1976. Through March, 1977 over 7,000 S/ELPS kits had been purchased. It has been projected by McGraw-Hill that more than 20,000 copies will be sold during the following year as availability information begins to reach more persons. Copies of recently prepared marketing and publicity information are included in Appendix B.

Utilization of this product has extended far beyond the original target audience and is expected to increase even further as a result of the recently completed studies with elementary age children from other Spanish-speaking backgrounds.

INSTRUCTIONAL MANUALS

Early in the project, efforts were made to maximize usability of all products to the greatest extent possible. Although this project was funded for development of materials for bilingual five-year-olds, their teachers and parents, it was also felt that some products could be used with other ages and other groups. The following four manuals which were initially designed earlier fell into this category:

- Working with Parents of Handicapped Children
- Trabajando con los padres de niños con impedimentos

- How to Fill Your Toyshelves without Emptying Your Pocketbook
- Cómo llenar sus estantes con juguetes sin gastar mucho dinero

An external consultant review also supported the use of these manuals with an extended audience. Therefore, permission was requested and received from USOE for release of the manuals to the Council for Exceptional Children for publication. The manuals were published without copyright or royalty payment to USOE, thus reducing the purchasing price. The manuals are, in essence, in the public domain and can be reproduced. At the same time, they are now available for purchase at a lower price than that for which they might be duplicated. A brief description of the manuals follows.

How to Fill Your Toy Shelves without Emptying Your Pocketbook
and
Cómo llenar sus estantes con juguetes sin gastar mucho dinero

Games, activities, and instructions for making manipulative learning equipment are included in these manuals. The equipment and activities have been designed to be used with handicapped and nonhandicapped young children in day care centers, classrooms, and at home.

All items can be made from things which can be saved in the home, such as empty bottles and cans; from scraps, such as lumber and fabrics; from materials usually found in preschool centers or classrooms, such as blocks, beads, and

pegboards; or from things which can be purchased in variety stores. Instructions for constructing several types of equipment, ranging from adult instructional aids, such as a felt board, to activities and games for children are included. All items are adaptable for small group or individual use. The equipment can be made by individual teachers, assistant teachers, and parents, or in a group workshop.

All instructions were tested by teachers and parents during a materials workshop. Directions for planning and conducting a similar materials workshop are detailed. Materials to be collected or purchased and the necessary tools and supplies are listed along with suggestions for arranging the workshop space into specific work areas.

Activities for using each item with children follow the directions for making equipment. Activities are included for developing skills in the following areas: Visual, Auditory, Gross Motor, Fine Motor, and Language and Concept Development.

Working with Parents of Handicapped Children
and
Trabajando con los padres de niños con impedimentos

Practical considerations and suggestions for working with parents of children with existing and/or potentially handicapping conditions are the focus of this manual. Written for those who have had little or no formal training in working with parents of handicapped children, the manual is particularly useful for day care, Head Start, and elementary school teachers.

Information on feelings and attitudes which may be encountered, specific suggestions on planning for meetings with parents, and guidelines for developing referral information and files are included. A "question and answer" format is followed in addressing critical situations and questions frequently asked by teachers and preschool staff. Major topics included are: Understanding How Parents Feel, Knowing Your Own Feelings, Meeting with Parents, and Following Up the Meeting.

Sources from which teachers and parents may obtain additional information related to specific types of handicaps are provided in the appendices. Bibliographies include: General Information and Activities, Personal Narratives, and Suggested Readings on the Handicapped. In addition, sample forms and suggestions for conducting parent interviews are included.

Initial reports of the sales of the English versions of the manuals has been quite rewarding. As of March 1976 (first quarter of publication) the following quantities had been sold:

Title	
Working With Parents of Handicapped Children	832
Trabajando con los padres de niños con impedimentos	28
How To Fill Your Toy Shelves Without Emptying Your Pocketbook	1,058
C[illegible]o llenar sus estantes con juguetes sin gastar mucho dinero	31

THE OBSERVATIONAL CHECKLISTS FOR REFERRAL (OCR)

The Observational Checklists for Referral (OCR) was written as a guide to help teachers and assistant teachers of young children identify possible problems and make appropriate referrals to other professionals. The OCR includes a General Checklist to be completed for each child and Specific Checklists to be completed only for children identified on the General Checklist. Items on the General Checklist were stated in broad terms to cover common physical or behavioral symptoms of problems. Each item on the General Checklist related to one or more Specific Checklists representing the areas of Health, Vision, Hearing, Speech and Language, Motor, Learning and Behavior. An accompanying manual included instructions for completing each checklist and the problem area it is designed to identify as well as descriptions of the specific behaviors the teacher should note.

The OCR was pilot tested by teachers and assistant teachers in Head Start, Day Care and public school kindergarten classes and was reviewed by a team of external consultants representing the fields of Speech Pathology, Audiology, Early Childhood, Special Education, and Nursing to obtain formative feedback. Research was conducted to compare the effectiveness of teacher observation and identification with professional screening by project staff and external specialists (clinical child psychologist, educational diagnostician, speech pathologist, audiologist, pediatrician, optometrist, and nurse). A final report on the OCR which includes the results of this research, details on development of the OCR, and consultant reviews was submitted to BEH and entered into the ERIC System in the spring of 1977. (Evans, J. S. Observational Checklists for Referral: Technical Report. Project No. G007500592, Grant No. 443CH60398).

The following section includes a summary of the research and development conducted, a report of a study conducted with parents, and recommendations for further development.

Instrument Overview and Development

Initial conceptualization and development of the OCR evolved from the Project Director's previous experiences with students of elementary education at the university level and with the need for giving future teachers the skills for identifying children in need of referral for more extensive evaluation. With the initiation of a one-year project with four-year-old Mexican American preschoolers, it became evident that day care teachers also needed a consistent and objective method of identifying problems of young children. As a part of this earlier project, the checklists were elaborated and tried out by day care staff. Teacher feedback and staff observations provided additional information for initial design of an instructional manual.

With the initiation of the current project, the checklists and manual were expanded for use as an identification instrument. This version included an instructional manual detailing instructions for completing each checklist, a general discussion of each problem area, descriptions of common behavioral manifestations of those problems, and guidelines for making and following up referrals.

The revised version of the OCR was tested by teachers and assistant teachers in the Riverside Day Care Center, Austin, Texas, and by public school kindergarten teachers in the Edgewood Independent School District, San Antonio, Texas. A pilot validation study was conducted in Austin to determine the feasability of conducting a more extensive validation

study. The purpose of the study was to determine the number of over- and under-referrals (false positives and false negatives) by comparing teacher-administered OCR results with screening evaluations by appropriate external specialists (speech pathologist, pediatrician, etc.). Table 5 summarizes the results of this study. These results indicated that the usefulness of the OCR could be expanded for older and younger children. Formative data obtained during this study provided the basis for a revision of the manual and checklists.

A second validation study was conducted at the A-Bar-Z Ponderosa Day Care Center in Austin during 1976. As in the first study, classroom teachers completed the checklists for each child, and external specialists conducted screenings for each area. Table 6 summarizes the results of this second study.

The results of these studies indicated a high rate of accurate identification and a low false negative rate (failure to identify existing problems.) The rate of false negatives ranged from 4.3% to 19.2% with the higher rates being for questionable problems such as umbilical hernia or possible muscle imbalance of the eyes at an age when such balance is not stabilized. The positive responses by teachers and assistant teachers using the OCR, none of whom had previous training in identification of existing or potentially handicapping conditions, clearly indicated the usability of the OCR by the teachers of young children. As stated previously, details of these studies are available through ERIC.

As a follow up to these studies efforts were made to determine the feasability of using the OCR with parents. The results of this study indicated that it was not only useful in parent identification of potential problems, but also served as a means of increasing communication between teachers and parents.

Table 5

Frequency and Percentage of Agreement/Nonagreement Between OCR and Examiner Observations

1975 Validity Study

	CONFIRMED IDENTIFICATION			UNCONFIRMED IDENTIFICATION			
CHECKLIST	OCR-POSITIVE EXAMINER-POSITIVE No./%	OCR-NEGATIVE EXAMINER-NEGATIVE No./%	TOTAL OCR-EXAMINER AGREEMENT No./%	OCR-POSITIVE EXAMINER-NEGATIVE No./%	OCR-NEGATIVE EXAMINER-POSITIVE No./%	TOTAL OCR-EXAMINER NON-AGREEMENT No./%	TOTAL No./%
Hearing	7 /12.1%	37 /63.8%	44 /75.9%	11 / 19.0%	3 / 5.1%	14 /24.1%	58 /100%
Speech/Language	12 /16.2%	45 /60.8%	57 /77.0%	8 /10.8%	9 /12.1%	17 /22.9%	74 /100%
Behavior	13 /59.1%	3 /13.6%	16 /72.7%	1 / 4.6%	5 /23.7%	6 /28.3%	22 /100%
Health	6 /18.8%	18 /37.5%	24 /56.3%	4 /12.5%	10 /31.2%	14 /43.7%	38 /100%
Vision	0 / 0 %	85 /97.7%	85 /97.7%	0 / 0 %	2 / 2.3%	2 / 2.3%	87 /100%
Motor	0 / 0 %	61 /85.9%	61 /85.9%	9 /12.7%	1 / 1.4%	10 /14.1%	81 /100%

Table 6

Frequency and Percentage of Agreement/Nonagreement Between OCR and Examiner Observations

1976 Validity Study

	CONFIRMED IDENTIFICATION			UNCONFIRMED IDENTIFICATION			
CHECKLIST	OCR-POSITIVE EXAMINER-POSITIVE No./%	OCR-NEGATIVE EXAMINER-NEGATIVE No./%	TOTAL OCR-EXAMINER AGREEMENT No./%	OCR-POSITIVE EXAMINER-NEGATIVE No./%	OCR-NEGATIVE EXAMINER-POSITIVE No./%	TOTAL OCR-EXAMINER NON-AGREEMENT No./%	TOTAL No./%
Hearing	13 /71.8%	66 /60.0%	79 /71.8%	25 /22.7%	6 / 5.5%	31 /28.2%	110 /100%
Speech/Language	14 /14.0%	51 /51.0%	65 /65.0%	21 /21.0%	14 /14.0%	35 /35.0%	100 /100%
Behavior	11 /23.9%	16 /34.7%	27 /58.6%	17 /36.9%	2 / 4.3%	19 /41.2%	46 /100%
Health	10 /12.2%	27 /32.9%	37 /45.1%	35 /42.7%	10 /12.2%	45 /54.9%	82 /100%
Vision	8 /30.8%	10 /38.6%	18 /68.6%	3 /11.6%	5 /19.2%	8 /30.8%	26 /100%

Teacher-Parent Study

Parents at the A-Bar-Z Ponderosa Day Care Center were invited to meet with SEDL staff regarding use of the OCR. This invitation was extended via a posted notice on the center bulletin board. Two meetings were held, attended by 25 parents. During these sessions, the purpose of the OCR was described and parents were asked to take the manual home, read it, and complete the checklists for their children, adding any comments they might have. Additional requests were received from parents who had not attended the meetings. Therefore, a letter describing the purpose of the OCR was prepared and 25 sets of materials were left at the desk for parents to take home. A total of 45 sets were taken, of which eight were returned unmarked, 35 completed and returned, and the remaining two disappeared. Of the 35 returned checklists, only 31 were used in this study.* Checklist results as completed by parents were compared with checklists completed by teachers of these 31 children and with the ratings obtained by the specialists who had screened the children.

The following figure shows the rate of agreement/disagreement between teachers and parents regarding children checked on one or more checklist items:

		TEACHER	
		No Problems Checked	One or More Areas Checked
PARENTS	No Problems Checked	8 (agree)	3 (disagree)
	One or More Areas Checked	3 (disagree)	17 (agree)

* Four children had withdrawn from the center for the summer months, and teacher checklists were not available for comparison purposes.

Of the children checked by the teacher as having some type of problem but not checked by the parent, one child was identified as "shy" by the teacher, one child was identified on the Speech Checklist as "speaking softly" and "speaking slowly" and one child was identified on the Speech Checklist items, "Talks like a younger child" and "Seldom talks." As it turned out, this child was three years eight months old, and had been moved into the four- to five-year-old class because of his physical size.

Of the three children identified by parents but not identified by teachers, one child was checked on the Behavior Checklist as wanting adult attention, one child was checked on the Hearing Checklist as saying "Huh?" frequently and wanting her own way, and the third child was identified by the parent as having frequent colds and allergies.

Although these certainly are not major differences, there are some implications. The items checked by the teacher, but not by the parent, caused the teachers to reevaluate their perceptions. For example, the teacher of the four-year-olds class stated that she had forgotten that the child who "spoke like a younger child" was, in fact, younger than the others.

The items checked by parents alerted the teachers to the need for a parent conference to see whether problems actually existed or whether the items checked were simply typical behaviors for a child of that age. Even allergies and colds were important to the teachers. Evidence from several checklists on other children indicate that children in Austin, Texas have allergies and colds which, in some cases, affect behavior.

Of the 17 children checked by both parents and teachers, all but one were checked on more than one checklist. (see Table 7.) In addition, there was a great deal of agreement between teachers and parents on specific items.

Table 7

Comparison of Screenings, OCR, and Follow-up

	PROFESSIONAL SCREENINGS			OCR CHECKLISTS				FOLLOW-UP
	NURSE	AUDIOLOGIST	SPEECH	TEACHER		PARENTS		
				Cklist	Item Comment	Cklist	Item Comment	
1	Not tested	OK	OK	Hth	Colds Allergy	Hth	Bone cond. Cold/earah	Observe
2	No resp.	No resp.	No resp.	Hr Lrn Sp Beh		Hth Sp Beh	Colds	Ref. to Diag. Clinic
3	L. ear occluded	OK	Short att. Poss. prob.	Hr Mtr Sp Beh		Hr Sp Beh		To Otologist
4	Fluid pneumonia	OK	OK	Hth Hr	Colds	Hth Hr Sp Mtr	Colds Asthma	To Hospital
5	No resp.	No resp.	No resp.	Hth Hr Vis Sp Beh Mtr		Hth Vis Sp Hr Beh		To EC/H
6	OK	OK	Not tested	Hth Hr Sp Beh	Colds	Hr Sp Beh		Observe
7	OK	Inconsistent	Def. prob.	Sp Beh Hr Vis		Hth Hr Sp Beh Mtr	Earah	To Sp/Hr Clinic
8	Tubes	OK	OK	Hth Hr Sp Beh	Colds Earah	Hth Hr Sp Beh	Tubes Oper.	Observe
9	Not tested	OK	Slight Dysfluency	Mtr		Hth Beh Mtr	Allergy Petit Mal	Observe
10	Not tested	OK	OK	Sp Beh		Hth Sp Beh	Colds Earah	Observe
11	Tubes	Failed Both Ears	Not Tested	Hth Hr Sp Beh	Colds Earah	Hth Hr Sp	Allergy Cold Tubes	To Sp/Hr Clinic
12	Tubes	OK	OK	Hth Beh	Colds Earah	Hr Beh	Aller-Colds Earah-Tubes	Observe
13	OK	OK	Poss. prob.	Hth	Colds Earah	Hr. Beh	Ear Infect.	Observe
14	OK	OK	Poss. prob.	Vis Beh		Vis Beh		Observe
15	Not tested	No resp.	OK	Beh		Sp		To Sp/Hr Clinic
16	OK	OK	OK	Beh		Hr Beh Sp	Earache	Observe
17	OK	OK	OK	Hth Hr Sp Beh Mtr		Hth Beh		Observe

The teacher and parent checklist responses were then compared with the results obtained by the specialists who had screened the children. Table II includes a comparison of results from screenings by the pediatric nurse, audiologist, and speech therapist, as well as identification of areas checked by teachers and by parents and follow-up action taken.

One fact was obvious from studying the checklists--colds, allergies, and ear problems were noted by both teachers and parents quite frequently (in 12 of the 17 cases). Fifteen of these 17 children were checked on the Hearing or Speech Checklist by either the teacher or the parent. These children were also checked on the Behavior Checklist. However, only seven of the same children were identified by the audiologist or speech therapist. Obviously, all these children were not severely or even moderately handicapped. Several of them "passed" professional screenings.

The professional examiners based their ratings on seeing each child only one time for a specific purpose. They were not concerned with, nor had knowledge of, children who were susceptible to frequent colds or allergies. Parents and teachers were, however, aware of these problems. Colds are frequent among young children in the Austin area where the weather changes frequently and dramatically. Allergies are a major problem for many people, and colds and allergies often result in stopped up ears, earaches, irritability, and general fatigue. Young children are not as verbal as adults and are unable to clearly identify their problems. A child with a succession of colds, allergies, temporary ear infections, and possible intermittent hearing loss (or at least a reduction in hearing sensitivity), may easily miss out on learning critical information. Further, the general feeling of listlessness or irritability may create problems of behavior. Therefore, frequently occuring colds and allergies should be considered an "ALERT" to teachers.

During those periods of time, young children may have difficulty attending or learning.

Several other "ALERTS" were evident when comparing the teacher and parent checklist results, many of which were helpful to the adults and beneficial to the children. For example:

Child No. 1 had previously had an ear operation and was subject to frequent colds and earaches, although he passed the auditory and hearing screening. The teacher's awareness of the previous hearing problem made her more aware of the need for speaking directly to the child and providing additional language experiences.

Child No. 2 had obvious problems and did not respond to screening. The parent, however, had rejected the screening results. After using the OCR and observing the child, the parent agreed to additional testing of the child at the Diagnostic and Evaluation Clinic.

Child No. 3 passed the audiometric screening but had an occluded ear. Speech and Hearing as well as Behavior were concerns of both the parent and teacher. This child was referred to an otologist.

Child No. 4 was an unexpected case--the nurse identified pneumonia at the time of examination and the child was taken to a hospital.

Child No. 5 also had obvious problems although the parent had previously rejected the possibility of any type of handicapping condition. After completing the OCR, the parent stated her surprise at the number of problem areas and requested information on obtaining further evaluation. The child was entered into the Early Childhood Handicapped Unit of the Austin school district.

In three cases, children had previously had ear operations (myringotomies) and tubes had been inserted. Although the teachers were aware of possible

hearing problems, they were not aware of the tubes and the children were going swimming each day. Communication between the parents and teachers and consultations with the physicians resulted in two of the children being removed from swimming, possibly preventing further damage to the ears.

The results of this study were not subjected to statistical analysis as the number of subjects involved was too small. In terms of individual children, the impact of this study was more important than achieving statistical significance. Children in need were referred immediately. Parents and teachers had a common, objective basis for communication about the problems of individual children. And, it is assumed that in some cases this early identification reduced or eliminated problems which might have become handicaps.

Although the OCR was useful for the purposes of this project and the response from teachers and parents has been favorable, additional work is necessary before the OCR becomes available for general use.

1. Checklist items should be consolidated and reduced in number. At present the checklists are too burdensome for the average teacher. Items which are not used should be eliminated and the interrelationship between observations should be more clearly described.

2. The instructional manual should be revised to include additional follow-up information, suggestions for classroom adaptation, greater emphasis upon parent-teacher communication, and recommendations for record keeping, and continuing use of the checklists.

3. Training is essential. Although there is no way of guaranteeing that teachers will read the instructional guide, planned training would increase usability and reduce misinterpretation of checklist items.

4. Development of a parent component including a modified version of the checklists, manual and audio/visuals is essential. The importance of parent-teacher communication in the observation and referral of children is illustrated in the results of the preceeding study.

SUPPLEMENTARY MATERIALS

The primary purpose of the Ability Development Program for Five-Year-Olds was to design and develop Supplementary Materials which would enable the classroom teacher to work with the mild to moderately handicapped child who was mainstreamed within bilingual kindergarten classes. These materials were to be used in conjunction with the Bilingual Kindergarten Program (SEDL, 1972) which is used across the nation in classes serving Spanish speaking five-year-olds and was adopted in 1974 by the State of Texas for public school use.

For a child to meet the objectives of the lessons in the Bilingual Kindergarten Program (BKP), he or she must acquire and utilize a complex array of skills. Although lessons in the BKP curriculum were designed in a developmental sequence, differences in children's ability to learn and the inclusion of a percentage of handicapped children in the preschool classroom created a need for activities and materials to augment the regular curriculum. Some children, because of disabilities which affect their ability to learn or because of experiential deficits, require extra assistance to learn. Therefore, the Supplementary Materials were designed to assist teachers who have no special education training and who must work with handicapped children within the regular classroom.

Design tested and field tested under close supervision of SEDL staff, the Supplementary Materials were developed to augment the basic curriculum by:

1. Providing materials which could be used with handicapped children, in an integrated setting by teachers with varying levels of competency;

2. Providing alternative techniques, procedures and methods for simplifying instruction, analyzing the skills and tasks required for performing an activity, identifying instructional needs and providing appropriate instruction.

3. Providing additional training for specific children in identified problem areas which would help them to progress within a mainstream classroom setting.

The elements of the BKP selected for addition of supplementary information and activities were motor, visual, auditory and ideas and concepts. These areas include perceptual-motor development, cognitive development and language development. However, information, techniques and procedures are also provided related to other areas such as social development and health.

Description of Supplementary Materials

The Supplementary Materials developed by the Ability Development Program were designed to be used by teachers, parents, and other adults. The materials were designed to be used in conjunction with the basic Bilingual Kindergarten Program (BKP). They were not designed to be used independently of the BKP. Through use of these materials, the teacher is helped to identify and better understand the child's problems. The materials supply the teacher with specific information on different types of problems, techniques and suggestions for adaptation of lessons, and provide remedial activities to give the child the extra assistance needed to progress with peers.

The final version of the Supplementary Materials includes an Instructional Guide, Entry Level Checklists, a set of 5 x 8 Observation, Information, and Action Cards, Home Activities and Supplementary Media. Following is a brief description of each of the materials. Samples of the Observation, Information and Action Cards appear at the end of this section. The Entry Level Checklists, instructions and samples of Home Activities, as well as samples of media are included in Appendix .

1. Instructional Guide - Use of the supplementary card file, as well as background information on the development of the Supplementary Materials is described. Also included are sections on methods of teaching the different components of the Bilingual Kindergarten Program.

2. Entry Level Checklists - Provide an organized method of observation of the child's ability to function in the preschool setting, as well as references to specific information on handling problems and classroom management. See Appendix C for the Entry Level Checklists.

3. Observation Cards - Designed to be used with Visual, Auditory, Motor, and Ideas and Concepts lessons of the Bilingual Kindergarten Program, each Observation Card identifies specific behaviors to observe in each lesson, and some immediate remedial actions to be taken as well as references to Information and Action Cards and prerequisite lessons in the BKP.

4. Information Cards - These cards provide information and suggestions on how to handle problems that may arise during the year. They are divided into two main sections: Daily Routines and Classroom Problems.

5. Action Cards - The Action Cards include a variety of ideas, techniques, suggestions and activities for teaching specific skills or tasks. Action Cards suggest:

   . alternate ways of teaching the same skill.
   . ways to simplify the task by eliminating stimuli or limiting the material.
   . a variety of ways that the child might practice the skill or task.
   . practical do's and don't's from other teachers.

6. Home Activities - A total of 36 activity sheets designed to be used by parents with their children as a supplement to classroom instruction in each of the following skill areas: visual, motor, auditory and ideas and concepts. See Appendix D for instructions and samples of the Home Activities.

7. Media - Additional media depicting handicapped children and adults, which can be substituted, for existing media in the Bilingual Kindergarten Curriculum is included. See Appendix E for sample of media.

Procedure

The writing and testing of the Supplementary Materials were carried out in six phases: design, design testing with teachers and children, revision, field testing with teachers and children, and final revision.

Throughout the developmental process, the activities were subjected to constant review and critique by SEDL staff. In addition, experts in the fields of psychology and special education reviewed the materials prior to and following field testing. In the design test stage guidelines were developed for the writing of the Supplementary Materials. The following considerations were included:

1. The materials should provide the teacher with information, techniques and procedures for identifying skills necessary for meeting curriculum objectives and for breaking down specific tasks into smaller, manageable steps according to the individual needs of the children.

2. The materials should provide the teacher with information, techniques procedures and specific activities to be used in conjunction with the BKP in helping the handicapped child to progress with his or her peers.

3. The materials should relate to the following BKP components: Visual, Auditory, Motor, Ideas and Concepts.

4. The materials should be designed to be used by teachers and assistant teachers having varying degrees of competency in working with handicapped children.

5. The materials should be designed for use without special training, i.e., should be exportable and self-contained.

6. The use of the materials should require minimal preparation time.

7. To increase cost effectiveness, efforts should be made to use existing BKP media as much as possible.

The remainder of this section describes the Supplementary Materials and the process of testing and revision in more detail.

The Entry Level Checklist was based on a task analysis of the entry unit of the BKP. It was designed to serve as a diagnostic tool in identifying children unable to perform subskills essential for learning and performing beginning level curriculum tasks and activities and to assess entry level social, self-help, and behavior during the first two weeks of school. The Entry Level Checklist is divided into two parts: Part I to be completed at the end of the first week of school, and Part II to be completed at the end of the second week (10 days) of school. Following each checklist item is a reference to an Information Card which provides more detailed information

on identifying problems and taking the necessary steps in remediation and/or referral.

Part I includes the following categories, each of which have sub-parts:

1. Takes care of toileting needs independently
2. Requires little or no assistance at mealtime
3. Responds to and follows simple directions
4. Interacts with adults and children
5. Cooperates in teacher-directed group activities

Part II includes the following categories, each of which have sub-parts:

1. Follows daily routine with minimal difficulty
2. Beginning to initiate independent activity
3. Changes activities easily and independently
4. Works independently at assigned group activity
5. Cooperates during group activity

These areas and the related sub-parts were identified by training staff and teachers as critical abilities for functioning in the kindergarten program. During the second year of the program, for example, eight out of the nine children in the experimental classes who were checked on three or more items (more than one item on both parts) on the Entry Level Checklist needed supplementary instruction or assistance.

Observation, Information, and Action Card design was based on an analysis of each lesson of the Auditory, Visual, Motor, and Ideas and Concepts elements of the BKP. During the first year, the objectives and content of each lesson were analyzed to identify the subskills necessary for completing the tasks. In addition, teachers who had implemented the BKP during the previous year were interviewed to identify problem areas. Information obtained from the teachers was combined with the task analysis to determine activities necessary for developing prerequisite subskills.

The first version consisted of Observation, Information and Activity Cards, written in both Spanish and English for each lesson of the BKP. During the design test period, the teachers implemented the supplementary

activities and feedback was provided to the project staff. The following types of information were collected:

- Which tasks were difficult for the children?
- Where did the skill break down?
- After using the supplementaries, were the children able to complete the task?

Feedback was also obtained on use of the Spanish and English versions of the materials and on the overall format and organization.

First year feedback provided data for content and format revisions and for discontinuing the Spanish version during the second year. As a result of this feedback the following revisions were made:

1. Observation Cards for the first unit (2 weeks) of the BKP were deleted and replaced by the Entry Level Checklist.
2. The Information Cards were divided into two main sections: Daily Routine and Classroom Problems. The Daily Routine section included problems which could be observed during specific periods of the day, while the Classroom Problems section included problems related to specific areas: Behavior, Health, Hearing, Motor, Speech and Language and Other. Information on identifying and handling problems, suggestions regarding classroom management, explanatory statements related to realistic expectations, as well as referral information were included.
3. More remedial and reinforcement activities, suggestion and techniques for simplifying tasks, information on pre-requisite lessons of the BKP.
4. Based on teacher recommendations, the Spanish version was deleted. The teachers felt the English version was more useful since they had received their training in English. In addition, elimination of the Spanish version would reduce the ultimate cost of the published materials.
5. The coding system was revised for more efficient use.
6. An Instructional Guide was added.

During the second year field test cycle, verbal and written feedback were obtained. In addition to the experimental classroom teachers,

seven teachers in San Diego, Texas and Philadelphia, Pennsylvania used the Supplementary Materials and provided written feedback. These data were collected on the overall usefulness of the Supplementary Materials rather than on a lesson by lesson basis. Teacher ratings of the Supplementary Materials are tallied below.

1. Overall, how useful have the Supplementary Materials been?

	Not Useful 1	2	3	4	Extremely Useful 5
a. Initial Checklists		1	3	2	4
b. Observation Cards		1	3	1	6
c. Information Cards		1		5	4
d. Activity Cards		2	1	2	5

2. Please rate the Supplementary Materials in terms of quality.

	Poor 1	2	3	4	Excellent 5
a. Initial Checklists		1	3	1	5
b. Observation Cards		1	3		7
c. Information Cards		1	2	1	6
d. Activity Cards		1	3	1	5
e. Supplementary Media		1	3		5

3. How easy or difficult has it been to use the Supplementary Materials?

	Difficult or confusing 1	2	3	4	Very easy 5
a. Initial Checklists			2	2	6
b. Observation Cards			1	2	8
c. Information Cards			1	3	6
d. Activity Cards			2	3	5
e. Supplementary Media			1	3	3

In addition to rating the supplementaries, the teachers provided responses to the following questions:

1. On the average, how many times during the week have you used the Supplementary Materials and with how many children. (Times)

   a. Observation Cards
   b. Information Cards
   c. Activity Cards

2. Should any parts (Initial Checklists, Observation, Information, Activity Cards) be omitted? Which ones?

3. What is your opinion of the general organization of the Supplementary Materials? Please list any suggestions for reorganization.

4. What is your opinion of the format of each part? Please describe any suggestions for change or particular strengths.

   a. Initial Checklists
   b. Observation Cards
   c. Information Cards
   d. Activity Cards

5. What is your overall opinion of the Supplementary Materials as an addition to the Bilingual Kindergarten Program?

6. Would you recommend the Supplementary Materials to other teachers of the Bilingual Kindergarten Program? Why?

7. Do you feel the time spent using the Supplementary Materials aided your overall teaching?

8. In what ways did you use the Supplementary Materials? Please check. State the one way in which you used them most often.

   As remedial activities for children who did not do the regular lessons_____
   As reinforcement activities for children who needed more instruction_____
   As expansion activities to add to the basic curriculum_____
   As alternate activities to substitute for the basic curriculum_____
   As additional activities for children who enrolled late_____

9. Please list any other comments or concerns.

Comments and responses to the above questions appear in Appendix F.

At the completion of the field test cycle, SEDL staff met with the experimental classroom teachers to obtain final recommendations for second round revisions. Teachers were also asked at this time to submit written answers to the following questions:

1. Should the Supplementary Materials be written in Spanish?

2. After using the Supplementary Materials, what would you say to another teacher about using them?

All answered "no" to the first question. Responses to the second question were as follows:

"Gives good and additional ideas. Prefer activity suggested on back of observation cards, where teacher could flip over."

"These are excellent in quality, depth and the insight you get. For a new teacher it must be like having a consultant next to you at each step, helping and guiding you."

"It may seem like extra work, but is highly useful and helpful."

"I am an old teacher and still found it extremely useful. I wish I could keep a set for my own personal use. Some things are so excellent that I wish I had the materials forever in personal use."

Analysis of the formative data resulted in the following list of recommendations:

1. Provide some suggestions directly on the Observation Cards which would be implemented immediately in breaking down a task.

2. Eliminate some of the cross referencing.

3. Add more activities.

4. Divide Observation cards by units

Completed revisions were reviewed by SEDL staff and an external consultant. A copy of the consultant's written report appears in Appendix G. Based on the consultant's recommendation, the title of the Activity Cards was changed to Action Cards because the Activity Cards include alternative teaching techniques and methods as well as activities.

The manual was revised to reflect changes in the cards and organization of the program. A section was added including a description of the Entry Level Checklist and suggestions for teaching the lessons in each of the four elements: Visual, Auditory, Motor and Ideas and Concepts.

Although the above steps have been described as discrete and sequential, in practice each was interwoven so that many aspects of the process were considered simultaneously. For example, feedback on the Supplementary Materials for the first four units was incorporated into the design of the Supplementary Materials for the remaining units.

The final version of the Supplementary Materials included 219 Observation Cards, one for every Visual, Auditory, Motor, and Ideas and Concepts Lesson in the Bilingual Kindergarten Program, lessons one through nine beginning with Day 11 (Chapter II, page 5). The observations and activities for Unit 9 are designed to help the teacher pinpoint problem areas and provide repetition of previous lessons and other forms of remediation before asking the child to combine skills or move on to readiness activities. Supplementary Materials are not provided for the last three units as these units were expansion activities, designed to provide those children who are ready with higher level reading readiness activities. Every observation on the cards is followed by

a reference number which tells the teacher which Action or Information Card to use for that particular problem. The card numbers appear on the top right hand corner and each number is prefixed by a letter which corresponds to the type of card. For example:

O-3 = Observation Card Number 3

I-4 = Information Card Number 4

A-6 = Action Card Number 6

In addition, many of the observations are followed by specific suggestions or ways to further break down a task at the time of the observation in order to further pinpoint the problem or to help the child achieve the objective. This information is written in small print following the observation.

It should be noted, however, that the purpose of these suggestions is to provide the specific information on how to break down a task or make it simpler. The intention, therefore, is to develop the skill, not to completely break down each task. Consequently, once a particular type of activity has been repeated several times and the task broken down on several Observation Cards, the same information is not repeated for later lessons. Instead different types of tasks are broken down. For example, the skill of sorting occurs early in the curriculum and on several Observation Cards. The teacher is directed to break down the task by reducing the number of pictures or objects, using objects or pictures which differ in one dimension only, etc. Many of the lessons beyond Unit 4 may involve sorting, but as part of a more complex task. Therefore, the task breakdown information beyond Unit 4 is related to the more complex task. It is expected that by this point the teacher will already be able to simplify the sorting task.

A total of 69 Information Cards provide information on identifying and

handling specific kinds of problems, such as Behavior, Hearing, Health, Motor, Vision, Speech and Language; as well as when and how to make appropriate referrals. References to organizations and other information sources are also included.

There are 109 Action Cards, each including five or more techniques, suggestions and alternative activities for teaching a task and/or for practicing related sub-skills.

The Observation, Information and Action Cards can be used without additional training by teachers or assistant teachers in conjunction with the Bilingual Kindergarten Program.

Home Activities were designed and written to be used at home by parents, as a supplement to classroom instruction. The activities are divided into the same four skill areas as the classroom supplementaries: Visual, Motor, Auditory and Ideas and Concepts. A total of 36 activity sheets for each of the four skill areas are included. Each activity sheet includes a minimum of five activities as well as instructions for making and using a home-learning material.

Due to time and recruitment problems, the Home Activities were not cycled through a complete developmental process. The activities written for the first five units were reviewed by a group of parents of handicapped children in the Austin Independent School District's Early Childhood Handicapped Program. They were also used by some of the teachers in the same school setting. Although many of the parents had children with disabilities of greater severity than the group of children for whom the activities were intended, the feedback obtained was relevant, as the objective was to determine clarity of instructions, availability of suggested materials and ease of implementation.

The majority of the activities were rated positively in all three categories, and the parents described the packages as valuable and very needed. Some minor wording changes were recommended as well as changes in suggested materials. For example, some activities were added which require the use of garden, household or garage materials and tools. Teachers using these activities expressed enthusiasm regarding the possibilities of use in working with parents as well as use by new and inexperienced teachers and assistant teachers in working with handicapped children.

The Home Activities were revised and the format changed to include a feedback form which could be completed by the parent and returned to the teacher, providing a means for the teacher to monitor the child's progress at home as well as the needs and abilities of the parents in carrying out the Home Activities.

The revised activities for all nine units were mailed to the same group of parents for review. Although the responses were very positive, as evidenced by the following comments, the total number of responses was limited. Also, not all activities were implemented. Comments made by parents included:

"They have been helpful."

"I truly see a need for activities for parents of handicapped children."

"We had loads of fun completing them. Even my older son enjoyed helping."

" The activities would have really helped me before, if I had this material when the two foster children came into my home. And I believe something in this kind of material should be available for all parents who have a handicapped child. Everything could be so much easier."

"I would recommend these activities to be available to all parents who need it and also to teachers who are involved with special needs children."

In summary, the Supplementary Materials of the Ability Development Program provide a means of identifying needs and individualizing instruction for the handicapped child within the regular Bilingual Kindergarten Program. The Supplementary Materials can be used by any teacher, assistant teacher, or team of teachers using the BKP. According to formative data, the Supplementary Materials are especially valuable to beginning teachers, assistant teachers, and teachers with little or no special education training who are teaching in mainstream settings.

SAMPLE OBSERVATION CARD

K-2 Auditory (e)
Body Awareness
P. 174

0-23

Environmental Sounds: Associating Body Sounds with Pictures

Child is unable to:

1. Identify the sounds on the recording. See Card A-26.

   Have the child observe you as you make the sound.
   Have the child imitate and say what she is doing.

2. Find the picture which shows the sound being made. See Card A-27.

   Have the child observe you as you make the sound.
   Point to the picture.

3. Direct his attention to the task. See Card I-3.

SAMPLE INFORMATION CARD

DAILY ROUTINE: GROUP WORK

I-3
INATTENTIVE

For the child who has difficulty paying attention to the teacher

1. Before school starts, decide on a method to get the children's attention. Different teachers prefer different methods:

   a. Blinking the lights.

   b. Ringing a bell.

   c. Saying in a firm voice, "Boys and girls."

   d. Standing up and raising your arm.

2. From the very first the children must be taught that this is the signal for them to stop what they are doing and look at you. Practice this several times, and praise the children who stop their work and look up.

3. Be sure that every time you ask for attention you have something important to say, and then say it quickly. Having children wait is asking for trouble.

4. Rather than punishing those who are consistent violators, try rewarding those who pay attention promptly. Let them go outside first, be first in line, or choose what they want to play with. You could also put their names on the board, or send a note home praising them.

5. All teachers will have days when no one seems to listen. This is often a result of weather change or an activity that is too exciting. Keep calm, tomorrow will be better.

SAMPLE ACTION CARD

ACTION CARD A-26

For the child who is unable to identify sounds on a recording

Voices and environmental sounds often sound differently on a record or tape.

1. The recording does not slow down or repeat itself. Stop the recording manually after each sound, and identify it or have another child identify it. Make the same sound yourself, if possible. Talk about the sound (compare and contrast with other sounds). Then, proceed with the activity as planned.

2. If the child still has difficulty, help her make a recording of familiar sounds. Stop the recording after each sound is made so that the child can see the differences between the original sound and the recording of that sound.

3. If the child is not able to hear and identify differences in sounds:
   a. Begin with one sound. Have the child observe you making the sound. For example, have the child watch you clap your hands, and help her identify the body parts used to make the sound. Then have the child turn around so that what you do cannot be seen. Alternate the target sound with another very different sound, and have the child raise a hand or tell you everytime the target sound is heard.
   b. Limit the number of sound objects used to two, and be sure that the sounds are grossly different at first.
   c. Give the child additional practice making sounds.
      1. have the child make these sounds after you:
         - tap fingers on table
         - stamp a foot
         - stamp both feet
         - clap hands
         - cough

4. If the child has difficulty attending to recordings:
   a. Read the story or sing the song yourself. Wait to introduce the recorded version when the child is very familiar with the song or story and attention span is longer.
   b. Let story time be an active rather than a totally passive time.
      1. Tell a story with actions
      2. Let the child supply the missing phrase
      3. Let the child pantomime movements
      4. Let a group join in on simple phrases
      5. Use costumes or props and let the group dramatize the story

ACTION CARD A-27

For the child who is unable to associate sounds with pictures

Association of sound with picture is an abstract concept, and many children will have problems.

1. If a child has trouble matching sounds to their pictures, reduce the pictures and sounds to two, and be sure that the sounds are grossly different at first.

2. If the child has difficulty, divide the activity into fout different ones:
   a. Match the object to object
   b. Match the picture to real objects, one at a time, saying each time that the picture and object are the same
   c. Match objects to their sounds
   d. Match the sounds to their pictures.

3. Show the child an object (ball, block, bell). Draw it as the child observes. Then, let him match the drawing to the object. Repeat the same procedure for two or three objects. Then, mix the objects and pictures, beginning with two.

4. If using a recording or tape of sounds causes problems, make the sounds yourself.

CHAPTER III

PILOT RESEARCH

INTRODUCTION

During Year Two of the Ability Development Project, pilot data were collected regarding use of the Supplementary Materials in the classroom and the associated utility of the Entry Level Checklist and the Observational Checklists for Referral. These data came from three experimental and two control classes, having a total enrollment of 121 pupils.

A continuing theme which pervaded the development of the supplementaries and the associated data collection effort reported here, was the belief that young children should not be diagnosed by only one instrument. Because of this, the supplementaries themselves thus contain ongoing diagnostic procedures. For the purposes of this study those children who received the most supplementary instruction were therefore identified as target children. For analytic purposes these target children were matched by age, sex and entry-test scores with pupils enrolled in the control classes.

Results are reported following a review of study objectives and procedures in the next two sections. In order to view these findings from several perspectives, three different but complimentary strategies are employed. First, descriptive findings are given, including relevant information about the schools, teachers and pupil groups involved. Next, statistical tests of significance are reported with regard to pupil achievement for the various groups. Finally, brief illustrative case studies are given. Summary discussions accompany each of these sections while suggestions for future research conclude the entire chapter.

PURPOSE/OBJECTIVES

The primary objective of this study was to obtain pilot data regarding the use of the supplementaries with Mexican American pupils who display learning problems in curriculum mastery. Other ADP-developed products are also included to study their relative usefulness for contributing to the identification of potentially handicapping conditions.

PROCEDURE

Selection

The selection process for the schools, teachers and pupils involved in the study is described below.

Schools and teachers. After presenting the research project to the Edgewood Independent School District Kindergarten and Elementary Supervisors, participating schools and teachers were selected. Two teachers were selected based on their previous participation during the developmental stage of the project in Year One. Other participants were selected based on 1) lack of participation in other special projects, 2) principal cooperation, 3) teacher cooperation, and 4) compatability of the teachers with those already selected in terms of education and experience. In all, six teachers in five different schools were selected. Due to poor record keeping on the part of one teacher, only five classes at four schools are included in the final study, three experimental and two control classes.

Pupils. Because the supplementaries themselves were designed to provide an ongoing diagnosis of curriculum mastery handicap, those ten pupils in each experimental class who received the most supplemental instruction as recorded by teachers were selected to comprise the target group. They were then matched with control pupils on the basis of age, sex, entry-normed reference percentiles (math and language), and entry-criterion-referenced test scores. Seven meaningful groups for descriptive and analytic purposes emerged: The total group, all experimental pupils, all control pupils, all target pupils, all non-target pupils, all experimental target pupils, and all control target pupils.

Instrumentation/Data Collection

Basic demographic information about the school district and the schools

involved in the study was collected using the Texas School Universe Data Book (c. November, 1976). Demographic data was also collected with respect to key teacher variables via a Questionnaire for Classroom Personnel completed at the beginning of the school year. Additionally, in March, 1977 observational data were collected concerning project teacher remediation techniques.

Main data collection focused on the pupils. Each instrument administered to pupils is now discussed in turn.

Pupil demographic data. Classroom rosters, completed at the beginning of the school year, were used to provide the following information on pupils: age, sex, ethnicity.

Entry language dominance. The S/ELPS was administered to all pupils at the beginning of the school year to determine initial language dominance. Chapter II of this report provides a full description of this ADP-developed instrument.

Observational Checklist for Referral. All teachers completed the OCR for their classes at the beginning of the year. Chapter II of this report provides a full description of this ADP-developed instrument.

Teacher perception of pupils. Two types of teacher perception data were collected. First, teachers were simply asked to identify those pupils consistently unable to master curriculum objectives. Second, teachers were asked to rate (1 = low to 5 = high) the amount of remediation (control classes) or supplementaries (experimental classes) each child required for the first and second semesters of school.

Pupil attendance. Teachers tallied and reported the number of absences per semester for each child.

Pupil referral data. Two types of information were collected regarding

pupil referrals for assistance outside the classroom. First, actual referrals made by teachers were identified. Next, because actual referrals were found primarily to reflect the limited services available, at the end of the school year teachers were also asked to make their ideal referrals assuming for the moment that all services were available.

ADP entry level checklist. (experimental classes only) The experimental teachers, as a part of their use of the supplementaries, completed the ADP-developed checklist for the first two weeks of school. These checklists identified pupil problems related to readiness for instruction in the curriculum and are also described in Chapter II.

Use of supplementaries. (experimental classes only) The experimental teachers also recorded the number of observations, activities, and supplementaries used with each child for each curriculum unit of instruction covered during the year.

Criterion referenced tests of curriculum mastery. The BKP has an accompanying set of criterion referenced tests (CRT) for each curriculum unit. Record of pupil performance on all CRT's administered was made available by classroom teachers for analysis. This includes 14 tests: 1 pretest, 10 unit tests, and 3 mastery tests administered throughout the school year. It should be noted here that not all teachers completed the entire curriculum during the year and data are incomplete past the second mastery test.

Norm referenced tests of academic achievement. Results of district-administered norm referenced tests (NRT) for the project classrooms were made available for this study. Although administered on a pre/post basis, two different tests were involved. The California Test of Basic Skills (CTBS) was administered to three classes and the Tests of Basic Experiences (TOBE)

was administered to two classes. Review of both tests by the ADP staff revealed that the tests neither resembled each other or the BKP curriculum in terms of content. To make the best of the situation, however, two decisions were made. First, the Pre-reading score of the CTBS was considered more comparable to the TOBE language test. Therefore, these two scores and the two math subtest scores were selected for receipt of statistical treatment. Percentile scores (for the CTBS, mid-kindergarten percentiles, and for the TOBE the only percentiles made available) were selected for use as the most convenient standard score available for common comparison. Second, because the BKP curriculum has its own pre/post measure for the first portion of the curriculum, those two tests would also be treated with the same analytic techniques usually accorded the normed referenced tests. Table 1 depicts the data collection schedule employed.

Data Analysis

Three different strategies are employed for reporting the information collected. First, all relevant descriptive data are presented to provide an overview of the variables under consideration. Frequencies, means, ranges, and standard deviations are employed. Next, statistical tests of significance are reported which address the issue of pupil differences. Chi square, analysis of variance, and analysis of covariance are the statistical techniques used here. Finally, an illustrative case study approach is utilized to highlight some of the special issues which emerged during the conduct of the study.

Table 1

Pupil Data Collection Schedule

DATA	September	October	November	December	January	February	March	April	May
Classroom Rosters	X								
Entry S/ELPS	X								
OCR	X								
ADP Checklisc	X								
Criterion Referenced Test	X	X	X	X	X	X	X	X	X
Use of Supplementaries	X	X	X	X	X	X	X	X	X
Norm Referenced Test	X							X	
Teacher Perception Data							X		
Pupil Attendance									X
Pupil Referral Data									X

RESULTS

Introduction

The three types of reporting strategies selected--descriptive, statistical and case studies--are now presented in turn. At the end of each section is a summary discussion which highlights those findings or issues considered most relevant. Recommendations for future research conclude this chapter.

Descriptive Findings

A primary question which emerged during the conduct of this study concerned the relative impact of variables other than project curriculum and use of supplementaries on pupil performance. First, do the results obtained reflect school system resource differences, teacher differences, pupil differences or true effects of the curriculum for supplementary instruction? This section will provide a review of the descriptive information collected about the schools, teachers and pupil groups included in the study and address their relative impact on the statistical findings reported in the next section.

Description of the district and participating schools. The Edgewood I.S.D. serves an area of primarily low income, urban Mexican American families on the west side of San Antonio, Texas. Over half of San Antonio population is Mexican American and a large percentage of this group lives in the Edgewood district. Because of its tax base, the district has faced severe financial problems. It has also faced the problems caused by the cultural and language differences of the people. It is only in recent years that a combination of progressive leadership and government funding efforts have led to progress.

The four schools involved in the project ranged in enrollment from 397 to 796. Two of the campuses were quite old (built in the 1940's), with one

school moving to a new campus during the school year. The other two campuses were equivalent, both built in the late 1960's. The resources avilable to the classroom teachers varied but were generally minimal for dealing with handicapping conditions. Teacher reports indicated all schools had district nurses and Plan A resource teachers available. It was also reported, however, that one of these resource teachers did not work with kindergarten pupils and another did not speak Spanish. Three schools reported having a part-time speech therapist, one of whom did not speak Spanish. Two schools reported counselors, one of whom did not take kindergarten children. One school was reported as having migrant services and one was reported as having a psychiatrist one day a week who did not speak Spanish. From this it can be seen that the outside resources available to this group of kindergarten teachers with predominately Spanish-speaking pupils were limited. Although the extent to which this can account for the results obtained is undetermined, it seems obvious that in cases of handicapping conditions, student progress is affected by more than the addition of supplemental curriculum.

Description of participating teachers.

1. Background data. Table 2 contains a summary of the teacher background data obtained through completion of the Questionnaire for Classroom Personnel. All teachers had college degrees; two of the experimental teachers had master's degrees and one was working on a master's. All were certified for kindergarten and bilingual education. All but one experimental teacher were also certified for elementary teaching, and one experimental teacher had a supervisory certificate. No teacher had certification in special education. The range of other grade levels taught was comparable

Table 2

Teacher Background Data

	E	C	T
1. Previous Academic Training			
High School	3	2	5
B.A.	3	2	5
Other Training M.A. Education	1		1
2. Are you a Certified Teacher?			
No			
Yes	3	2	5
For which level certified?			
Kindergarten	3	2	5
Elementary	2	2	4
High School			
Bilingual Education	3	2	5
Special Education			
Certificate in Supervision	1		1
Working on M.A. in Bilingual/Bicultural Education	1		1
M.A. Early Childhood Education	1		1
3. What other level or grade have you taught?			
None	1	1	2
First	1	1	2
Second		1	1
Third	1		1
Fourth	1	1	2
4. Have you had previous experience in a bilingual Program?			
No			
Yes	3	2	5
How long? 0			
1		1	1
2			
3	1	1	2
4			
5	1		1
6	1		1
5. How long have you used the SEDL Bilingual Kindergarten Program?			
1 year	1	1	2
2 years			
3 years	2	1	3

E = Experimental
C = Control
T = Total

between the two groups, ranging from kindergarten only to fourth grade. All had previous experience in a bilingual program ranging from one to six years, with the experimental teachers having more experience. All were comparable in terms of previous years of work with the SEDL Bilingual Kindergarten Program.

2. Differences observed in data monitoring. Several differences were noted among the teachers in terms of their completion of the OCR, administration of the CRT, addition of supplemental curriculum, and knowledge and use of referral resources. Differences in the pattern of supplementary usage were also noted among experimental teachers. One teacher, for example, completed only four OCRs while another completed 22. All teachers administered the CRT's, but some tested one item at a time for the whole class while others administered the whole test to small groups. All teachers reported adding to the curriculum, but what was added varied depending on the curricula with which teachers were familiar. Knowledge of referral sources varied as did actual referrals. One teacher made 3 referrals while another teacher made 11. Finally, the percentages of pupils in the experimental classes receiving the supplementaries ranged from 81 per cent to 65 per cent to 59 per cent. The extent to which these observations reflect teacher differences or pupil differences cannot be determined, nor can the resulting effect on the data be established.

3. Observation of remediation techniques. On March 8, 1977, classroom observations were conducted in all project classrooms for the purpose of identifying the methods teachers employed to work with

students unable to master lesson objectives. The teachers were observed for a minimum of one hour during which they worked with students on one lesson from Unit 9 of the BKP curriculum. Both the teachers and their aides were observed during this period. The observation categories and the frequency with which experimental and control teachers and aides were observed using each technique are found below:

Remediation Technique	Experimental Teachers (N=6)	Control Teachers (N=4)
1. Repeat the task	13	3
2. Break task into parts	17	0
3. Go to earlier task	2	0
4. Change language	8	2
5. Put child through motions	3	4
6. Ask another child to help	6	1
7. Ignore failure	0	1
8. Negative response	0	1
9. Others	17	3
	66	15

Generally it was found that the experimental teachers used more remediation techniques of greater variety than did the control teachers.

Description of participating pupil groups. The identification of target pupils in a manner useful to statistical analysis proved a difficult task given the variances described above and the small number of classes involved. After much deliberation it was decided to identify those ten pupils in each of the experimental classes who received the most instruction using the supplementaries and match them with control pupils by age, sex and entry NRT and CRT scores. This decision was made because the use of the supplementaries was the major focus of the study and also provided the best indication of ongoing curriculum mastery handicap. It is realized, however, seven groups emerged for potential contrast and analysis: The total group, all experimental pupils, all control pupils, all target pupils, all

non-target pupils, all experimental target pupils and all control target pupils.

While it is realized that this is by no means a traditional definition of handicap, given the data available, this strategy operationalized a definition which would provide sufficient numbers for statistical analysis.

1. Demographic description. Tables 3 and 4 summarize the seven pupil groups by age and sex. Average age upon entering kindergarten for the total group was five years and five months (65months). Although the experimental pupils were significantly older than the control pupils ($p = .02$) and non-target pupils were significantly older than target pupils ($p = .006$), there was no significant difference in the ages of the experimental target and control target pupils. Additionally, although there were generally more females than males, chi square analysis revealed no significant differences between any of the groups in terms of set ratio. With the exception of five pupils in one of the experimental classes, 100 per cent of the pupils were Mexican American.
2. Entry language dominance. Table 5 depicts the percentage of pupils in each of the sample groups falling into each of the five S/ELPS categories. Chi square analysis of the number of pupils in S/ELPS category 1 (Spanish Dominant) versus the number of pupils in the other categories revealed one significant difference: Target pupils were significantly more often Spanish Dominant than non-target pupils.
3. Observational Checklist for Referral. Because of the extreme variation in how teachers used the OCRs and the associated difficulty in determining whether the obtained data reflected teacher

Table 3

Pupil Sex

Sample	N	Males		Females		Significant Differences
		N	%	N	%	
All Classes						
Total Group	121	57	47.11	64	52.89	
All Experimental	71	36	50.70	35	49.30	E vs C: NS
All Control	50	21	42.00	29	58.00	
All Targets	60	26	43.33	34	56.67	T vs NT: NS
All Non Targets	61	31	50.82	30	49.18	
All Experimental Targets	30	13	43.33	17	56.67	ET vs CT: NS
All Control Targets	30	13	43.33	17	56.67	
Superior Class Removed						
Total Group	98	48	48.98	50	51.02	
Experimental	71	36	50.70	35	49.30	
Control	27	12	44.44	15	55.56	E vs C: NS
Targets	47	21	44.68	26	55.32	
Non Targets	51	27	52.94	24	47.06	T vs NT: NS
Experimental Targets	30	13	43.33	17	56.67	
Control Targets	17	8	47.06	9	52.94	ET vs CT: NS

Table 4

Pupil Age

Sample	N	$\bar{X}$	Range	σ	Significant Differences
All Classes					
Total Group	121	65.43	60-72	3.64	E > C: p = .0169
All Experimental	71	66.08	60-72	3.68	
All Control	50	64.50	60-71	3.41	
All Targets	60	64.52	60-72	3.54	NT > T: p = .0059
All Non Targets	61	66.33	60-72	3.54	
All Experimental Targets	30	64.77	60-72	3.75	ET vs CT: NS
All Control Targets	30	64.27	60-71	3.36	
Superior Class Removed					
Total Group	98	65.57	60-72	3.70	
All Experimental	71	66.08	60-72	3.68	E > C: p = .0238
All Control	27	64.22	60-70	3.47	
All Target	47	64.51	60-72	3.67	NT > T: p = .0060
All Non Target	51	66.55	60-72	3.49	
All Experimental Targets	61	66.33	60-72	3.54	ET vs CT: NS
All Control Targets	17	64.06	60-69	3.60	

Table 5

Pupil S/ELPS Scores: Entry Language Dominance

Sample		1		2		3		4		5	
	N	n	%	n	%	n	%	n	%	n	%
All Classes											
Total Group	121	64	52.89	19	15.70	17	14.05	9	7.44	12	9.92
All Experimental	71	41	57.75	10	14.08	5	7.04	7	9.86	8	11.27
All Control	50	23	46.00	9	18.00	12	24.00	2	4.00	4	8.00
All Targets	60	41	68.33	10	16.67	3	5.00	1	1.67	5	8.33
All Non Target	61	23	37.70	9	14.75	14	22.95	8	13.11	7	11.48
All Experimental Targets	30	23	76.67	4	13.33	0	0	0	0	3	10.00
All Control Targets	30	18	60.00	6	20.00	3	10.00	1	3.33	2	6.67
Superior Class Removed											
Total Group	98	52	53.06	17	17.35	9	9.18	8	8.16	12	12.24
Experimental	71	41	57.75	10	14.08	5	7.04	7	9.86	8	11.27
Control	27	11	40.74	7	25.93	4	14.81	1	3.70	4	14.81
Target	47	33	70.21	8	17.02	1	2.13	0	0	5	10.64
Non Target	51	19	37.25	9	17.65	8	15.69	8	15.69	7	13.73
Experimental Target	30	23	76.67	4	13.33	0	0	0	0	3	10.00
Control Target	17	10	58.82	4	23.53	1	5.88	0	0	2	11.76

Chi Square Analyses:
(Number in Category 1 vs all other categories)

E vs C: NS
T>NT: p = .05
ET vs CT: NS

1 = Spanish
2 = Predominantly Spanish
3 = Bilingual
4 = Predominantly English
5 = English

differences or true pupil differences, the children in each class with the highest OCR scores were identified for analytic purposes, with a maximum number set at 10 per class. Chi square analysis revealed one significant difference: target pupils were more often those who received high OCR ratings ($p = .005$). Given that the OCRs were administered at the beginning of the school year and target pupils were identified on the basis of later use of supplemental remediation, this provides support for the predictive validity of the OCR for the identification of handicapping conditions. Table 6 provides the summary of this data.

4. Teacher perception. Teachers were asked to rate pupils with respect to ability to master instructional objectives and the need for remediation/supplementation. Again, chi square analysis revealed significant differences only between non-target and target pupils ($p = .005$). Table 7 contains this data.
5. Referrals. Chi square comparison of those pupils who were referred during the school year with those who were not again revealed that target pupils were also those most often referred ($p = .005$). This is also true when teachers were asked to make their ideal referrals ($p = .05$). Table 8 is a summary of this data.
6. Absences. Absence data was collected for all pupils on a semester basis. Analysis of variance revealed no significant differences between experimental and control, target and non-target, or experimental target and control target pupils. Table 9 is a summary of this data.
7. ADP Entry Level Checklist. When those experimental

Table 6

Observational Checklists for Referral (OCR) Data

Sample	1 N	1 %	2 N	2 %	≤N	Significant Differences
All Classes						
Total Group	35	28.93	86	71.07	121	
All Experimental	25	35.21	46	64.79	71	E vs C: NS
All Control	10	20.00	40	80.00	50	
All Targets	26	43.33	34	56.67	60	T>NT: p=.005
All Non Target	9	14.75	52	85.25	61	
All Experimental Targets	17	56.67	13	43.33	30	ET vs CT: NS
All Control Targets	9	30.00	21	70.00	30	
Superior Class Removed						
Total Group	29	29.59	69	70.41	98	
Experimental	25	35.21	46	64.79	71	E vs C: NS
Control	4	14.81	23	85.19	27	
Target	21	44.68	26	55.32	47	T>NT: p=.05
Non Target	8	15.69	43	84.31	51	ET vs CT: NS
Experimental Target	17	56.67	13	43.33	30	
Control Target	4	23.53	13	76.47	17	

1 = High OCR rating
2 = Low OCR rating

Table 7

Teacher Perception Data

Sample	A					B				
	1		2			1		2		
	N	%	N	%	ΣN	N	%	N	%	ΣN
Total Group	21	17.36	100	82.64	121	26	21.49	92	76.03	118
All Experimental	13	18.31	58	81.69	71	18	25.35	50	70.42	68
All Control	8	16.00	42	84.00	50	8	16.00	42	84.00	50
All Target	19	31.67	41	68.33	60	22	36.67	38	63.33	60
All Non Target	2	3.28	59	96.72	61	4	6.90	54	88.52	58
All Experimental Target	12	40.00	18	60.00	30	15	50.00	15	50.00	30
All Control Target	7	23.33	23	76.67	30	7	23.33	23	76.67	30
Superior Class Removed										
Total Group	18	18.37	80	81.63	98	21	21.43	74	75.51	95
Experimental	13	18.31	58	81.69	71	18	25.35	50	70.42	68
Control	5	18.52	22	81.48	27	3	11.11	24	88.89	27
Target	17	36.17	30	63.83	47	18	38.30	29	61.70	47
Non Target	1	1.96	50	98.04	51	3	5.88	45	88.24	58
Experimental Target	12	40.00	18	60.00	30	15	50.00	15	50.00	30
Control Target	5	29.41	12	70.59	17	3	17.65	14	82.35	17

KEY

A = Unable to Master instructional objectives

B = Use of Remediation/Supplementation

1 = Yes 2 = No

Chi Square Analyses

	A	B
E vs C:	NS	NS
T > NT:	p=.005	p=.005
ET vs CT:	NS	NS

(Superior Class Removed)

E vs C:	NS	NS
T > NT:	p=.005	p=.005
ET vs CT:	NS	NS

Table 8

Referral Data

Sample		Real				Ideal			
		1		2		1		2	
		N	%	N	%	N	%	N	%
All Classes									
Total Group		28	23	93	77	38	31	83	69
All Exper.	71	19	26.76	52	73.24	25	35.21	46	64.79
All Control	50	9	18.00	41	82.00	13	26.00	37	74.00
All Target	60	20	33.33	40	66.67	27	45.00	33	55.00
All Non Target	61	8	13.11	53	86.89	11	18.03	50	81.97
All Exper. Target	30	12	40.00	18	60.00	17	56.67	13	43.33
All Control Target	30	8	26.67	22	73.33	10	33.33	20	66.67
Superior Class Removed									
Total Group		22	22.45	76	77.55	32	32.65	66	67.35
All Exper.	71	19	26.76	52	73.24	25	35.21	46	64.79
All Control	27	3	11.11	24	88.89	7	25.93	20	74.07
All Target	47	15	31.91	32	68.09	22	46.81	25	53.19
All Non Target	51	7	13.73	44	86.27	10	19.61	41	80.39
All Exper. Target	30	12	40.00	18	60.00	17	56.67	13	43.33
All Control Target	17	3	17.65	14	82.35	5	29.41	12	70.59

Chi Square Analyses

	Real	Ideal
E vs C	NS	NS
T > NT	p=.05	p=.05
ET vs CT	NS	NS

Key

1 = Referred

2 = Not Referred

Table 9

Absence Data

Sample	Semester 1			Semester 2		
	X	Range	σ	X	Range	σ
All Classes						
Total Group	5.99	0 - 57	7.23	7.46	0 - 70	11.94
All Exper.	6.97	0 - 57	8.53	8.90	0 - 70	14.95
All Control	4.60	0 - 25	4.56	5.42	0 - 26	4.75
All Target	5.23	0 - 25	5.10	6.57	0 - 70	9.50
All Non Target	6.74	0 - 57	8.83	8.34	0 - 70	13.95
All Exper. Target	5.07	0 - 17	4.78	6.70	0 - 70	12.37
All Control Target	5.40	0 - 25	5.48	6.43	0 - 26	5.53
Superior Class Removed						
Total Group	6.65	0 - 57	7.79	8.35	0 - 70	13.07
All Exper.	6.97	0 - 57	8.53	8.90	0 - 70	14.95
All Control	5.81	0 - 25	5.42	6.89	0 - 26	5.73
All Target	5.66	0 - 25	5.41	7.21	0 - 70	10.58
All Non Target	7.57	0 - 57	9.43	9.39	0 - 70	15.04
All Exper. Target	5.07	0 - 17	4.78	6.70	0 - 70	12.37
All Control Target	6.71	0 - 25	6.41	8.12	0 - 26	6.54

NOTE: Analyses of variance procedures indicated no significant differences between groups for either semester.

class pupils who received the highest scores on the Entry Level Checklist were compared with those who did not, chi square analysis revealed no significant differences. It should be noted, however, that target pupils did have a greater percentage of pupils receiving checks for the first two weeks of school than did non-target pupils. These data are found in Table 10.

Summary Discussion. Several issues emerged in the course of conducting this pilot research: the first focused on which variables accounted most for the academic progress of handicapped pupils, and the second on the methodological issues involved when an attempt is made to research these variables. The descriptive information presented in this section will be discussed in light of each of these two issues.

The academic progress of handicapped pupils is obviously the product of many forces, including resource availability and teacher and pupil variables as well as any curriculum or supplemental materials which may be used. The first of these forces is addressed in this section, i.e., what outside resources were available to the classroom teachers and subsequently to the pupils themselves. In the situation of a handicapped pupil, the addition of such outside assistance is probably a prerequisite for academic progress. Given that the outside resources available to all the classes in this study were minimal, the extent to which assistance provided by supplemental materials could be realized by any individual child is questionable.

Next, although the teachers involved were quite similar in terms of the demographic information presented, teacher differences observed in the course of data monitoring were considerable. How these differences at this point

Table 10

ADP Entry Level Checklist

Sample	Week # 1					Week # 2				
		1		2			1		2	
	EN	N	%	N	%	EN	N	%	N	%
All Exper.	71	15	21.13	56	78.87	71	15	21.13	56	78.87
Exper. Target	30	8	26.67	22	73.33	30	9	30.00	21	70.00
Exper. Non Target	41	7	17.07	34	82.93	41	6	14.63	35	85.37

1 = Problem(s) Checked

2 = No Problem(s) Checked

NOTE: Chi square analysis revealed no significant between group differences for either week.

translated to the instructional level could only be conjecture. Certainly however, teacher variables play a great part in whether or not the benefit of supplemental instruction can be realized by pupils.

A final factor is the pupils themselves. In this study, descriptive data were presented which showed pupil comparability on a number of variables. The only significant difference found between experimental and control classes was that experimental class pupils were older. In comparison with non-target pupils, however, target pupils were more often Spanish Dominant, received more checks on the OCR, were perceived by teachers as having difficulty with instructional objectives and needing remedial/supplemental assistance, and were actually referred or the subject of ideal referrals. Although experimental target and control target pupils were matched in terms of age, sex, and entry NRT/CRT scores, and no significant chi square differences were found between the two groups on any of the other variables, it should be noted that experimental target pupils had higher percentages on all the other variables associated with the target group. Experimental target pupils, in contrast with control target pupils (1) were Spanish Dominant (77 per cent versus 60 per cent), (2) received higher scores on the OCR (57 per cent versus 30 per cent), (3) were more often perceived by teachers as unable to master instructional objectives (40 per cent versus 23 per cent) or in need of remediation/supplementation (50 per cent versus 23 per cent), (4) were more often referred (40 per cent versus 27 per cent) or suggested for ideal referral (57 per cent versus 33 per cent). Given the amount of literature available today which discusses the extreme variability among handicapped pupils and the potential inappropriateness of statistical analyses, it could well be that the pupils in the experimental target group were, in fact, pupils with greater handicap. Although this was

not indicated at the beginning of the year on the NRT and CRT, differences were observed on all the other variables associated with being a target child.

All of these considerations have tremendous impact at the methodological level. For example, although every effort was made to select similar school situations, and comparable instructional personnel, adequate accountability and control for these two vital factors were probably not sufficient given the small sample size involved in this pilot data collection. The lack of outside resources could overshadow any subsequent effects of the supplementaries, as could teacher variability. Additionally, although experimental target and control target pupils were matched in terms of age, sex, and entry scores, there are other indicators present that the experimental target pupils may, in fact, have been pupils with greater academic handicap. Again, given the small numbers involved in this study, true effects of the supplementaries could be obscured.

Statistical Findings

Introduction. Analysis of variance and covariance were performed comparing experimental and control, target and non-target, and experimental target and control target pupils in terms of NRT language and NRT math. Due to coding and programming incompatibility, CRT information could not be used in these analyses. Initial comparability, gains within groups, relative differences in gains, and final comparability among groups were explored. After these analyses were performed, results indicated one control class with superior performance. A second set of analyses were performed omitting this class. The results of both sets of analyses are reported, followed by a summary discussion.

Results: all classes.

1. Initial comparability. Three significant between-group differences were found at project entry: non-target pupils were significantly higher than target pupils in terms of NRT language and math percentiles and experimental pupils were significantly higher than control pupils on NRT math.
2. Within-group gains. All groups made significant gains in achievement as measured by the NRT language and math tests.
3. Final comparability. At project end, non-target pupils continued to be significantly higher than target pupils on the NRT language test but not on the NRT math test. Control pupils were significantly higher than experimental pupils on exit NRT math and control target pupils were significantly higher than experimental target pupils on both language and math exit NRT.
4. Comparisons of gains. Analysis of covariance procedures indicated that both control and control target pupils made significantly greater gains than either experimental or experimental target pupils on both NRT language and NRT math.

A summary of this data is found in Tables 11 and 12.

As mentioned previously, inspection of this data revealed that one control class made superior gains in comparison to all the other classes. All descriptive data and tests of statistical significance were thus performed again, omitting this class. This information will now be reported.

Results: superior class removed.

1. Descriptive information. Omitting the class which displayed superior gains did not change any of the relationships previously

Table 11

Norm Referenced Test Data:
All Classes

Sample	Language				Math			
	N	X	Range	σ	N	X	Range	σ
Total Group								
entry	98	10.92	1 - 66	12.71	110	18.42	1 - 96	22.54
exit	101	45.00	1 - 99	27.33	107	50.43	1 - 99	32.51
All Exper.								
entry	58	11.74	1 - 66	13.32	62	22.94	1 - 96	25.95
exit	59	42.03	1 - 99	27.08	61	42.52	1 - 99	29.60
All Control								
entry	40	9.72	1 - 41	11.83	48	12.58	1 - 67	15.57
exit	42	49.17	2 - 96	27.45	46	60.91	3 - 99	33.53
All Target								
entry	47	6.94	1 - 45	9.91	57	12.51	1 - 67	15.74
exit	53	34.98	1 - 93	27.27	57	45.46	1 - 99	35.53
All Non Target								
entry	51	14.59	1 - 66	13.94	53	24.77	1 - 96	26.80
exit	48	56.06	7 - 99	22.98	50	56.10	8 - 99	27.96
All Exper. Target								
entry	24	7.92	1 - 45	11.17	27	14.56	1 - 60	16.44
exit	27	26.56	1 - 74	22.69	28	32.04	1 - 93	31.00
All Control Target								
entry	23	5.91	1 - 36	8.52	30	10.67	1 - 67	15.13
exit	26	43.73	2 - 93	29.25	29	58.41	3 - 99	35.27

Table 12

Norm Referenced Test Data Analysis Summary

A. Between Group Differences

Analysis	Subject	E vs C	T vs NT	ET vs CT
All Classes				
Pretest Differences	Language	NS	+NT:p=.0028	NS
	Math	+E:p=.0154	+NT:p=.0042	NS
Posttest Differences	Language	NS	+NT:p=.0002	+CT:p=.0193
	Math	+C:p=.0037	NS	+CT:p=.0044
Gains Differences	Language	+C:p=.0434	--	+CT:p=.0089
	Math	+C:p=.0045	--	+CT:p=.0098
Superior Class Removed				
Pretest Differences	Language	NS	+NT:p=.0089	NS
	Math	NS	+NT:p=.0049	NS
Posttest Differences	Language	NS	+NT:p=.0000	NS
	Math	NS	+NT:p=.0099	NS
Gains Differences	Language	NS	--	NS
	Math	NS	--	NS

B. Within Group Gains

Subject	Total	Experimental	Control	Experimental Target	Control Target
All Classes					
Language	.0000	.0000	.0000	.0001	.0000
Math	.0000	.0001	.0000	.0391	.0000
Superior Class Removed					
Language	.0000	.0000	.0000	.0001	.0002
Math	.0000	.0001	.0000	.0391	.0002

reported in the descriptive finding section of this chapter. There was still no significant between-group differences in terms of sex ratio. Experimental pupils continued to be older than control pupils ($p = .02$) and target pupils significantly older than non-target pupils ($p = .006$). Again target pupils (1) were significantly more often Spanish Dominant, (2) received higher ratings on the OCR, (3) were perceived by teachers as unable to master instructional objectives and in need of remediation/ supplementation, (4) were more often the subject of real or ideal referrals. There were no differences among any groups with respect to absences. Additionally, although none of the analyses again reached significance, experimental target pupils had higher percentages displaying target pupil characteristics than did control target pupils, indicating that this group could possibly have greater handicaps. Summaries of these descriptive findings are found in Tables 3-9.

2. Initial comparability. Analysis of variance of entry NRT language and math percentiles revealed one significant difference: non-target pupils were significantly higher than target pupils.
3. Within-group gains. All groups made significant gains in achievement on both NRT language and math tests.
4. Final comparability. At project end, the only significant difference between groups was again significantly higher language and math scores obtained by non-target pupils when compared with target pupils.
5. Comparison of gains. No significant differences between relative gains were identified by analysis of covariance procedures. Tables 12 and 13 contain a summary of these data.

Table 13

Norm Referenced Test Data:
Superior Class Removed

Sample	Language				Math			
	N	X	Range	σ	N	X	Range	σ
Total Group								
entry	79	12.11	1 - 66	13.50	88	21.70	1 - 96	23.97
exit	86	41.56	1 - 99	25.83	88	43.00	1 - 99	28.75
Exper.								
entry	58	11.74	1 - 66	13.32	62	22.94	1 - 96	25.95
exit	59	42.03	1 - 99	27.08	61	42.52	1 - 99	29.60
Control								
entry	21	13.14	1 - 41	14.27	26	18.77	1 - 67	18.53
exit	27	40.52	2 - 80	23.31	27	44.07	3 - 96	27.75
Target								
entry	36	7.83	1 - 45	10.97	44	14.59	1 - 67	17.22
exit	44	29.02	1 - 74	22.49	45	35.38	1 - 93	29.69
Non Target								
entry	43	15.70	1 - 66	14.47	44	28.82	1 - 96	27.61
exit	42	54.69	7 - 99	22.53	43	50.98	8 - 99	25.72
Exper. Target								
entry	24	7.92	1 - 45	11.17	27	14.56	1 - 60	16.44
exit	27	26.56	1 - 74	22.69	28	32.04	1 - 93	31.00
Control Target								
entry	12	7.67	1 - 36	11.04	17	14.65	1 - 67	18.90
exit	17	32.94	2 - 63	22.28	17	40.88	3 - 89	27.40

Table 14

Missing Data

Test	Control Classes 1(N=27)	2(N=23)	Experimental Classes 3(N=21)	4(N=23)	5(N=27)	Total (N=121)
Entry Language	6	4	1	2	10	23
Exit Language	0	8	3	4	5	20
N Omitted for Covariance - Language	6	11	4	6	13	40
Entry Math	1	1	0	2	7	11
Exit Math	0	4	3	4	3	14
N Omitted for Covariance - Math	1	5	3	6	9	24

Summary Discussion

Four methodological issues warrant discussion with respect to the statistical analysis reported above, two which relate specifically to this section and two which were mentioned previously and should be underscored here.

For the data presented in this section, two methodological problems were present which had an effect on the results obtained. First, as shown in Table 14, there was a definite problem with missing data. Scores were missing for roughly 1/3 of the pupils on the language NRT and 1/5 of the pupils on the math NRT. Given the small number of pupils involved in the study, this loss of data is most unfortunate. Second, the use of two different NRT tests, both of which were rated as unrelated to the curriculum and to each other, undoubtedly added an unaccountable variance to the data and subsequent analysis. Both of these issues reduce confidence in the results obtained and have important implications for future research which will be discussed at the end of this chapter.

Two issues mentioned previously, teacher and pupil differences, should be referenced again here. Because of the statistical results obtained which indicated wide differences in pupil performance gained by class, each class was considered separately and compared with every other class using analysis of covariance. Two classes, one experimental and one control, showed consistently greater gains than the others while one experimental class consistently showed the least gain. These differences, whether due to teacher or pupil differences, certainly obscured any measurement of the effectiveness of the Supplementaries.

Although the selection criteria employed was chosen because of its expected statistical utility, the methodological problems discussed here and

in the section providing descriptive results have diminished the confidence that can be placed in the statistical findings of this pilot research. Therefore, in an effort to indicate some of the benefit of using the supplementaries not revealed through the analyses, the few children in the three experimental and remaining control class who would be defined as handicapped by the traditional state or school district criteria and their progress is now briefly described.

Of the 30 target children in the experimental classes (i.e., the ten children in each class who received the most supplementary instruction as recorded), six children were referred for speech therapy. Five children were enrolled in speech therapy and one placed on a waiting list. Each of these children were examined by a school district qualified therapist. Four children were referred for medical examination and one for psychological evaluation and received assistance of some type (e.g. glasses, ear operation). Thus, of the 30 "target" children identified for statistical analyses, 11 had a traditionally identifiable handicapping condition which interferred with learning. Of the control class pupils, two children qualified as speech handicapped; no other referrals were made. Whether the experimental classes actually enrolled more handicapped pupils or the experimental teachers were more sensitive to the identification of handicaps cannot be ascertained. Yet this certainly has affected the statistical analyses previously reported.

Table 15 shows these traditionally defined handicapped children by referral/handicap, NRT language and math percentiles and gains. For experimental class pupils, the number of supplementaries received is also shown. Although the problems or insufficient and missing data is again revealed, pupil gains are shown for these traditionally defined handicapped

Table 15

Traditionally Defined Handicapped Pupils: Descriptive Information

Class/Child	Referral/Handicap	NRT Percentiles Language			Math			Number of Supplementaries
		Pre	Post	Gain	Pre	Post	Gain	
Ex 1-13	Speech (not served)	13	8	-5	1	22	+21	30
Ex 1-15	Speech	5	59	+54	1	35	+34	16
Ex 1-17	Speech	2	32	+30	15	93	+78	83
Ex 1-18	Medical (neurological vision, speech)	7	13	+6	1	12	+11	28
Ex 2-7	Speech	2	1	-1	24	2	-22	26
Ex 2-15	Speech	2	-	-	3	-	-	38
Ex 2-16	Speech	3	13	+10	2	9	+7	25
Ex 3-5	Medical (hearing)	5	10	+5	43	1	-42	2
Ex 3-12	Medical (hearing)	-	3	-	1	1	0	8
Ex 3-17	Psychologist	-	-	-	11	8	-3	6
Ex 3-26	Medical (vision)	40	-	-	51	51	0	4
Control-15	Speech	4	40	+36	8	43	+35	-
Control-22	Speech	-	2	-	5	13	+8	-

pupils incclasses using the supplementaries.

Other issues identified during the course of data collection remain to be presented. Therefore, the next section of this chapter is composed of a few case studies which provide a fuller picture of project issues and findings. Suggestions for future research complete this chapter.

Case Studies

Individual case studies often bring to light critical aspects of a research situation which may not be evident when only numerical descriptors and statistical tests of significance are employed. They particularly serve to indicate the complexity involved in the situation under study, in this case, the influence of a supplementary curriculum on the academic progress of low income, Spanish-speaking, mainstreamed, kindergarten pupils enrolled in classes taught by teachers of varying backgrounds in ability, in a school district which generally has poor facilities and minimal resources.

When traditional resources fail. One point made in this report has been that few resources were available to pupils in this study and that many handicapping situations have prerequisite resource needs before supplemental curriculum could be of help. The importance of the quality of the resources used to help a handicapped child was also highlighted in the case of Maggie. A Spanish dominant child identified on the OCR as having problems in the areas of hearing and speech and language, Maggie had low entry NRT and CRT scores. Her classroom teacher worked with her very cooperative mother who took the child to a doctor. The doctor recommended no treatment, saying nothing was wrong. By the end of the year however, Maggie had suffered permanent hearing loss due to nerve damage, identified by a second physician. Some supplemental

instruction was used throughout the year; the teacher worked with the child to have her communicate when hearing problems arose, and worked with the other children to understand the problem; the mother was cooperative and took the child to the doctor. However, the child's academic progress was minimal, perhaps overshadowed by the increase in her hearing problem. Therefore, it can be seen that not only availability but quality of resources is an important contributor to the academic progress of the handicapped.

When family situations contribute to problems. Although not discussed previously, certainly family variables must contribute to student progress. Ray, another Spanish dominant child, began the year with a variety of problems identified by the teacher on the OCR and low NRT and CRT scores. He also received supplemental instruction during the year, but no NRT gain was noted by the end of the year. During the year, the teacher discovered that this child was being abused by a step-parent. Although reported to the family social worker, no action had been taken at the time of the teacher's last report in May. In fact, other children in the family covered up the situation.

In other cases, the teacher's work with family members resulted in reducing the problems of some children. The point here is that information regarding family situations may be an important variable to consider when researching pupil progress.

The creative use of resources. Frank, a predominately Spanish-speaking child, was listed on the OCR as having both speech/language and motor problems. He had low entry NRT scores but performed at the class norm entry CRT. In addition to the use of supplementaries, the teacher referred this child to a speech therapist. The therapist felt that his problems were maturational and would be outgrown. Knowing the teaching styles of the probable first grade teachers this child might be placed with the next year, the teacher also referred

Frank to a counselor. The counselor made recommendations about best teaching strategies and backed the teacher in recommending that the child be placed in a particular class the following year. Thus, the teacher used the outside resource to get support for future child placement. Although relative gains made by this child were not outstanding during this academic year, the course set by allowing him to be placed in the best possible learning context for the next year is expected to be quite beneficial. This case not only illustrates the use of resources but also points up the need for longitudinal research. Often the positive benefits of teacher efforts or supplemental instruction may not be apparent during one school year.

These brief case studies have served to continue to highlight the complexity of the research situation under question. In the next section of this chapter, all the variables discussed are synthesized and recommendations for future research are made.

RECOMMENDATIONS FOR FUTURE RESEARCH

On the basis of the positive formative input received (see Appendix F) and the gains shown for several of the traditionally defined handicapped pupils who received supplemental instruction (see Table 15), it is believed that the supplementaries may be beneficial for use by the bilingual kindergarten classroom teacher working with mild to moderate handicapped mainstreamed children. Due to methodological difficulties, this pilot research effort is not considered an adequate study of the effective use of the ADP-developed Supplementary Materials. Most important, however, is that much has been learned to guide future research efforts in this area. Previously identified issues are now briefly synthesized and discussed, and major situational variables, methodological issues, and final design considerations to guide future research are offered.

Four situational variables are considered important and should be considered in future research. These include: (1) resources available, their use, and quality; (2) family situation; (3) teacher differences; and (4) other curriculum employed. All these variables are considered prime contributors to studying the benefits of supplemental curriculum instruction in terms of pupil progress. In the future, sufficient data to access the relative effects of these variables must be collected.

At the methodological level, several recommendations for further research are made. First, the original sample size should be sufficiently large to allow for more meaningful statistical treatment of the data. Next, target pupils must be identified by employing a variety of criteria which allow for a more accurate match on all relevant variables. Adequate and consistent instrumentation is also a must. Finally, extremely close data collection

monitoring should be conducted on a continuous basis to reduce the problem of missing data.

The issues brought out in this pilot research have been discussed by others. Like Badian (1976) and Badian and Serwer (1975), these authors have discussed the inadequacies of many techniques aimed to identify the young child with learning disabilities and support the use of multiple measures. Along with Wynn and Associates (1975) in a recent review of the research regarding mainstreaming, the following common problems have been identified: (1) small, unrepresentative sample size, (2) major uncontrolled variables, (3) inadequate instrumentation, (4) lack of cross-program comparison, (5) lack of longitudinal studies, (6) lack of generalizability of results to preschool education as a whole. A mixed strategy is proposed to eliminate many of these problems.

In addition to multiple or mixed identification and data collection, the most appropriate suggestion for further preschool research applicable to the ADP-developed Supplementary Materials is that proposed by Moores (1974) who makes use of Chronbach's Characteristic by Treatment Interaction Model. It is felt that research consisting only of comparisons between two groups has subsequently limited value, and therefore, the study of different treatments for different pupils is advocated. In the case of the ADP-developed Supplementary Materials, there were children who were helped; there may also be a certain type of teacher for whom the Supplementary Materials are of particular benefit. It is also suggested that the major focus of future studies be the identification of the characteristics of those teachers and pupils who realize the greatest benefit from the Supplementary Materials and the conditions which promote the greatest benefit.

CHAPTER IV

DISSEMINATION

Dissemination Activities of the Ability Development Program have included presentations at major conferences, workshops and training sessions for large groups of people not directly involved in the program, mail-out distribution of pamphlets and abstracts of various products, as well as responses to requests for information.

The following three objectives in the original proposal for this project related to dissemination. These were:

1. To prepare informational materials on the products under development for the purposes of obtaining field test sites and disseminating information about the project.

2. To conduct dissemination activities related to (a) sites already using Bilingual Kindergarten Program who are potential users of the Supplementary Materials and (b) other sites and/or individuals working with young children, sites which are potential users of instruments and teacher training materials.

3. To compare the effectiveness of dissemination efforts as measured by rate of response to conference presentations, conference displays, and mail-outs.

In the original proposal, dissemination of information was not projected until the last half of the second year. Because of the numerous requests for information, however, it was necessary to begin these activities during the last part of the first year of the project. This made attainment of Objective Three impractical. It was not possible to distinguish accurately between responses to presentations vs. displays vs. mail-outs as additional requests continued to trickle in or overlap.

Objectives One and Two were accomplished to a greater extent than projected. The dissemination activities are described in the following sections.

PRESENTATIONS

Through oral presentations at conferences and workshops approximately 600 people received information. The following presentations were made as a part of project activities.

"Early Identification of Handicapped Children" Day Care Workers. Austin, Texas, March 1977.

"Attitudes and Stereotypes Related to Parents" Teachers of Preschool Handicapped Children. Austin, Texas, March, 1977.

"Early Identification, Screening and Referral of Handicapped Preschoolers" and "Attitudes and Stereotypes Related to Parents" Child Care Personnel Inservice, Texas Department of Public Welfare. Austin, Texas, February, 1977.

"Training CDA Candidates in Early Identification and Screening of Preschool Children" Community College Instructors, Richardson, Texas, January, 1977.

"Counseling with Parents of Handicapped Children" Texas Association on Mental Deficiency. San Antonio, Texas, August, 1976.

"Interface: The Setting, the Professional, the Parent--Early Childhood Conference" San Antonio, Texas, May, 1976.

"Identification of the Young Bilingual Child who is Handicapped" International Bilingual/Bicultural Conference. San Antonio, Texas, May, 1976.

"Identification and Supplementary Instruction" American Educational Research Association Annual Meeting. San Francisco, California, April, 1976.

"Early Identification of Handicaps by Parents" Education Service Center. Austin, Texas, February, 1976.

"The Ability Development Program for Five-Year-Olds" Follow Through Conference. Austin, Texas, January, 1976.

"Identifying and Teaching the Young Chicano who is also Handicapped" Head Start Conference. Houston, Texas, September, 1975.

"Multicultural Approaches to the Education of Young Children" International Annual Convention of the Council for Exceptional Children. Los Angeles, California, April, 1975.

"Special Needs of the Young Handicapped Mexican American" Annual Conference: Council for Exceptional Children. Chicago, Illinois, April, 1976.

"Information on New Instructional Materials" Early Childhood Classes. University of Texas, Austin, Texas, April, 1976.

"Teachers Working with Special Children" Early Childhood Special Education Class. University of Texas, Austin, Texas, November, 1975.

"Parent and Child" Child Inc., PAC. Austin, Texas, September, 1975.

"Bilingual Program and Supplementary Materials" Riverside Parents Night. Austin, Texas, February, 1976.

"Supplementary Materials for the Teachers" Principals Meeting, Edgewood School District. San Antonio, Texas, August, 1976.

"Special Needs of Mexican American Families" Texas Mental Health/Mental Retardation. San Antonio, Texas, February, 1976.

INFORMATIONAL MATERIALS

Copies of the pamphlets, abstracts, and booklets which were distributed or mailed during the project period are included in Appendix H.

Pamphlets describing the total program were mailed or distributed to more than 700 persons.

Inserts, single column descriptives, were included with mail-outs distributed by SEDL. This included more than 1,700 total program inserts and 1,000 copies of specific product inserts (These inserts were not reprinted after the initial supply was exhausted).

Typed Abstracts providing more detailed information on specific products were mailed to approximately 600 individuals. In contrast to the pamphlets and inserts which were used for general distribution, the typed abstracts were mailed in response to specific requests for information from the field. Thus, in one sense, these requests were a measure of the number of individuals responding to presentations or other written information.

Booklets related to aspects of the project were printed in limited quantities and distributed at various conferences. These included:

"How to Fill Your Toy Shelves without Emptying Your Pocketbook - Mini Copy"

"Early Identification of Handicapping Conditions"

"Observational Screening"

"Speech and Language Problems"

Instructional Manuals. During the Pilot and Field Test stages, copies of various manuals were disseminated at no charge to the user. This included: 200 copies of Working with Parents of Handicapped Children, 350 copies of Observational Checklists for Referral, 600 copies of How to Fill Your Toy Shelves without Emptying Your Pocketbook, and 30 copies of the Supplementary Materials.

Other dissemination related to specific products developed under this project has been conducted by the publishers, the Council for Exceptional Children and CTB/McGraw-Hill. In addition to BEH-USOE credit within product manuals, publicity items distributed by CTB/McGraw-Hill also included acknowledgement of funding by USOE. (See Appendix B for copies).

In addition to formal presentations, workshops, and distribution of written materials, many persons have become aware of this project through visits to SEDL. Graduate classes from the Departments of Special Education and Early Childhood, Curriculum and Instruction at the University of Texas have regularly

come to SEDL for program presentations. Other project presentations have been made for persons from other countries (Australia, England, Newfoundland, France, Canada, and China) who have visited SEDL during the last two years.

In summary, information regarding the project and the products developed has already reached several thousand individuals. Dissemination will continue beyond the end of the project as the commercial publishers (CTB/McGraw-Hill, National Educators Publishing Company, and Council for Exceptional Children) provide information to potential users. In all cases, recognition of the funding source as well as recognition of SEDL as the producer is included. Thus, project efforts will continue to benefit an increasing number of teachers, parents, and children.

CHAPTER V

SUMMARY STATEMENT

This report has provided the reader with a comprehensive review of the accomplishments of the Ability Development Project for Five-Year-Olds (BEH Project No. 44CH50237, Grant No. G007500592). This project was conducted from June 1, 1975 to May 31, 1977 and aimed to develop supplementary instructional materials for use with handicapped Mexican American pupils mainstreamed into kindergarten programs using the Bilingual Kindergarten Program as curriculum base.

The first chapter contained general project background and overview information. Chapter II included a comprehensive description of the development process as well as the final products themselves. A discussion of some pilot research carried out during the second year of the project was the focus of Chapter III, while Chapter IV presented the breadth of product dissemination which has already occurred. A brief description of each project-developed product, including both accomplished and projected dissemination, and recommendations for future research conclude this report.

The Spanish/English Language Performance Screening (S/ELPS)

This instrument, originally designed under a previous grant, was completed during the presently reported project. Basically the S/ELPS is an oral language test designed to assist the classroom teacher in objectively determining each child's stronger or dominant language for initial instruction. It was developed as a method of comparing Spanish versus English oral receptive and expressive language performance in children whose home language

may be Spanish. It does not make comparisons between children. Administration is in two parts, Spanish and then English, and five language categories are available for child placement: Spanish (I), Predominantly Spanish (II), Bilingual (III), Predominantly English (IV), and English (V). After formative data collection and analysis revealed high reliability and validity for use with preschool and kindergarten Mexican American pupils in Texas, the S/ELPS was put out for bid by commercial publishers. CTB/McGraw-Hill won the contract and published the S/ELPS in spring, 1976. The published administration kit includes a manual, manipulatives, pictures, and Spanish and English record forms. CTB/McGraw-Hill also sponsored further research which extended reliability and validity findings to Mexican American, Cuban, and Puerto Rican pupils, kindergarten through third grade. The S/ELPS became available for purchase in September, 1976. Through March, 1977 over 7,000 S/ELPS kits have been purchased. McGraw-Hill projects that over 20,000 copies will be sold during the following year as availability information is disseminated.

The Observational Checklists for Referral (OCR)

The purpose of the OCR is to provide a standardized format with which to identify the problems of young children. In addition to a General checklist, several other specific checklists are available to the user: Health, Vision, Hearing, Speech and Language, Motor, Learning, and Behavior. An accompanying manual provides instruction for completion of the checklists as well as specification of behaviors to be noted. The OCR was originally conceptualized based on the experience of the Project Director in working with university-level elementary education students. Exploration of use of the OCR was extended to preschool teachers during a previous project and

further extended to kindergarten teachers and day care parents during the current project. The OCR has been found useful for a variety of situations. Responses from both teachers and parents have been favorable. However, additional work is needed before it can become available for general use.

Instructional Manuals

These four project products include Working with Parents of Handicapped Children, Trabajando con los Padres de Niños Con Impedimentos, How To Fill Your Toy Shelves Without Emptying Your Pocketbook, and Como Llenar Sus Estantes con Juguetes sin Gastar Mucho Dinero. They provide practical, useful information for both teachers and parents as their titles imply. Early in the project, it was felt that these manuals had an extended potential for usefulness; thus, with the permission of USOE, they were released to the Council for Exceptional Children for publication. Published without copyright or royalty to USOE, they are both available at a reduced price and legally reproducible by the general public. As of March, 1976, a total of 1,949 copies had been sold.

Supplementary Materials

The primary purpose of this project was to design and develop Supplementary Materials which would enable the classroom teacher with no special education training to work with the mild to moderately handicapped child mainstreamed within the bilingual kindergarten class. As developed these materials were designed to be complementary to the Bilingual Kindergarten Program (BKP), and include (1) Instructional Guide, (2) Entry Level Checklist, (3) a set of 5 x 8 Observation, Information, and Action Cards, (4) Home Activities, and (5) Supplementary Media Materials. Brief descriptions

of each follow.

1. Instructional Guide - Use of the supplementary card file, as well as background information on the development of the Supplementary Materials is described. Also included are sections on methods of teaching the different components of the Bilingual Kindergarten Program.

2. Entry Level Checklists - Provide an organized method of observation of the child's ability to function in the preschool setting, as well as references to specific information on handling problems and classroom management. See Appendix for the Entry Level Checklists.

3. Observation Cards - Designed to be used with Visual, Auditory, Motor, and Ideas and Concepts lessons of the Bilingual Kindergarten Program, each Observation Card identifies specific behaviors to observe in each lesson, and some immediate remedial actions to be taken as well as references to Information and Action Cards and prerequisite lessons in the BKP.

4. Information Cards - These cards provide information and suggestions on how to handle problems that may arise during the year. They are divided into two main sections: Daily Routines and Classroom Problems.

5. Action Cards - The Action Cards include a variety of ideas, techniques, suggestions and activities for teaching specific skills or tasks. Action Cards suggest:

   . alternate ways of teaching the same skill.
   . ways to simplify the task by eliminating stimuli or limiting the material.
   . a variety of ways that the child might practice the skill or task.
   . practical do's and don't's from other teachers.

6. Home Activities - A total of 36 activity sheets designed to be used by parents with their children as a supplement to classroom instruction in each of the following skill areas: visual, motor, auditory and ideas and concepts.

7. Media - Additional media depicting handicapped children and adults, which can be substituted, for existing media in the Bilingual Kindergarten Curriculum is included.

Formative data suggest that the materials are especially valuable to beginning teachers, assistant teachers, and teachers with no special education training

who are teaching in a mainstream setting.

Recommendations for Future Research

The pilot data collected during the second year of the project was quite valuable in that it highlighted the complexity of such research. The control of such major confounding variables as resources available, their use and quality, family situation, teacher differences, and other curriculum employed was found crucial. Also underscored were such methodological issues as obtaining a sufficient sample size, designing a comprehensive identification strategy for target pupils and their control match, selection of adequate instrumentation, and the importance of close data monitoring. At final analysis, the Supplementary Materials are now ready for research and dissemination purposes. Keeping in mind the control and other methodological issues mentioned above, it is here suggested that the focus of such research be on the identification of characteristics of those teachers and pupils who realize the greatest benefit from the supplementaries and the conditions which promote greatest benefit.

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APPENDIX A

EXTENDED STUDY OF THE S/ELPS: TEST SITES AND EXAMINERS, TESTING PROCEDURE AND RESULTS

TAKEN FROM The Spanish/English Language Performance Screening (S/ELPS): Extension of Reliability and Validity Studies with Cuban, Puerto Rican and Mexican American Children Preschool through Third Grade; Evans, Butler, Schmidt, Zuniga; July, 1977; pp. 15-31.

2. Test Sites and Examiners

Sites were selected to include students of Cuban, Puerto Rican, and Mexican American origin. Mexican American students were tested at 3 test sites (California, Arizona, Texas), Puerto Rican children were tested in Pennsylvania and Cuban students in Florida. Test sites were chosen on the basis of their participation in a bilingual program and location within a predominantly Spanish-speaking neighborhood. At each site, the students were randomly selected from lists of students with Spanish surnames. All examiners were trained and supervised by a staff person from the Southwest Educational Development Laboratory. The examiners received four hours of training before actual testing began. The training consisted of two hours of familiarization with the test materials and procedures, followed by two hours of practice administration under the direct supervision of the staff member. All examiners were bilingual residents of the local community and familiar with the local dialect. In two sites, the examiners were familiar with the children being tested (San Antonio and Miami). In the other sites, the examiners had not met the children prior to testing.

Mexican Americans in Texas. One hundred and ninety-eight Mexican American children in kindergarten through third grade were tested in San Antonio, Texas. Since the criterion related validity of the S/ELPS for use with kindergarten children had been established in previous studies, five-year-olds were not included in this part of the study. The reasure of criterion-referenced validity was obtained

TABLE 2

SUBJECT/EXAMINER SUMMARY

Origin	Site	Number of Children	Grade Levels	Examiners	Test Conditions	Date of Testing
Mexican American	School District A School District B (concurrent validity) San Antonio, Texas	145 53 198	1-3	Classroom teachers, assistants, and SEDL staff	Child's classroom and hallway	Sept. 76
	Yuma, Arizona	93	K-3	Assistant teachers unknown to children	School cafeteria and vacant classrooms	Oct. 76
	San Diego, California	166	K-3	Students of the U. S. International University	Child's classroom and vacant vacant classrooms	Dec. 76
Cuban	Miami, Florida	84	K-3	Resource teachers and parents with limited familiarity with children	Outside child's classroom and school cafeteria	Oct. 76
Puerto Rican	Bethlehem, Pennsylvania	201	K-3	Teachers unknown to children	Resource rooms	Jan. 77

only for children in first through third grades (N=145) using teacher ratings of language dominance. In determining the concurrent validity of the S/ELPS, children in kindergarten through third grade who had already been administered the James Test of Language Dominance were tested with the S/ELPS (N=53). The testing in San Antonio was conducted by teachers, assistant teachers, or Lab staff in September, 1976. SEDL staff administered the S/ELPS to children participating in the concurrent validity study. The tests were administered within the child's classroom and/or in the hall outside the child's classroom.

Mexican Americans Outside Texas. A total of 259 Mexican American children in kindergarten through third grade were tested in Yuma, Arizona and San Diego, California. In Yuma, testing was conducted by assistant teachers who were not previously acquainted with the children. The testing was conducted in the school cafeteria and in a vacant classroom. An additional sample of children in fourth through seventh grade were also tested. However, the results of these tests were not included in the data analysis because the number of subjects in this group was too small for meaningful analysis. In San Diego, 166 children were tested. The testers at this site were students from the United States International University and were not previously acquainted with the children. The testing was conducted in the child's classroom or in an empty classroom.

Cubans. Eighty-four children of Cuban origin in kindergarten through third grade were tested in Miami, Florida in October, 1976. The examiners were resource teachers and parents of students. The examiners were familiar with some of the students being tested. Testing was conducted in an area outside the child's classroom or in the school cafeteria.

Puerto Ricans. Two hundred and one children of Puerto Rican origin in Bethlehem, Pennsylvania were tested during January, 1977. Although these students were in an open classroom setting and were not grouped strictly according to their grade level, they had been attending kindergarten through third grade. Therefore, there was less distinction between grades for the Puerto Rican children than for the other groups tested. The tests were administered by unemployed teachers and testing was conducted in the school resource room.

3. Testing Procedure

Although the testing conditions and examiners varied slightly from site to site, the same testing procedure as described in the S/ELPS manual was followed at all sites. Each child was individually tested by a bilingual examiner. After greeting the child, the examiner proceeded directly into testing in Spanish. The initial test questions (¿Cómo to llamas?; ¿Lienes hermanos y hermanas?; ¿Qué te gusta hacer en casa?) are conversational in nature and usually encourage the child to converse freely. It was noted that most children readily adapted to the testing situation and responded freely to the test questions and items. The examiner recorded a verbatim account of the student's responses, adding comments on the record form when necessary. In no case was the child cued or told to speak in one language or another. At the completion of testing, the student was thanked for his or her cooperation and returned to the classroom.

Following the testing of all students, the teachers were asked to give their ratings of the student's language performance on the same five point scale used in the S/ELPS. A written description of each of the categories on the scale was given to the teacher to follow in rating each child. The teacher had no knowledge of the child's performance or rating on the S/ELPS. Therefore, the

teacher ratings were independent of the S/ELPS results. Only the bilingual teachers or assistant teachers who had known the child for at least one month rated the child's language performance.

4. Results

Two measures of test validity and four measures of reliability were studied. Criterion-referenced validity was evaluated by comparing the S/ELPS scores with an external criterion of oral language dominance, teacher ratings. Concurrent validity was evaluated by comparing the S/ELPS scores with the scores from the James Test of Language Dominance. The four reliability measures were: 91) test-retest, (2) interrater, (3) interscorer, and (4) intratater.

Criterion-Related Validity. The external criteria against which S/ELPS scores were compared was teacher judgment of each child's oral language performance based on their classroom experience with the child for a period of at least one month. Classification of each child's oral language abilities was made according to the same scale used in the S/ELPS, as described in the preceeding section. In analyzing the criterion related validity data (i.e., teacher judgments versus S/ELPS scores), the data from the Puerto Rican students were analyzed separately. This was done because the teacher judgments for Puerto Rican students were not collected in the same manner as in the other four test sites. Discussion of this variation and the data obtained are included in the following section.

Pearson's product moment correlations were thus computed comparing teacher ratings and S/ELPS scores across all test sites, excluding Pennsylvania. This analysis resulted in an overall validity coefficient of .83. Table 3 presents

the correlations between the S/ELPS scores and teacher classifications by site, by grade level, and by Spanish language sub-group. The resulting validity coefficients range from a high of .92 for all kindergarten children to .51 for all third graders. Validity coefficients of the Spanish language sub-groups range from .83 for Cuban Americans to .68 for Mexican Americans in California.

Table 4 presents a matrix of the number of children included in each category by teacher rating and S/ELPS classification; therefore, the table portrays the rate of agreement/disagreement between these two measures of oral language dominance. There are indications that the teacher ratings at the second and third grade levels were based on their judgments of the child's overall language performance, including subject area performance (reading, writing, and math) as well as oral language skill. Therefore, the validity coefficients for children in second and third grade may have been different (possibly higher) had the teacher ratings been based solely on the child's oral language ability.

Criterion Validity for Puerto Rican Subjects. The validity data on the children of Puerto Rican origin was analyzed separately due to the fact that the criteria of oral language dominance used in Pennsylvania was not comparable to that used in other test sites. In Pennsylvania, the criterion classifications were based on the instructional grouping of the students rather than the teachers' ratings by S/ELPS classifications. The Pennsylvania groupings were as follows:

(1) Spanish dominant - a Spanish speaker whose English abilities are insufficient for the child to profit from English instruction

(2) Bilingual - a Spanish speaker with some oral English language skills who is able to read in Spanish at the first grade level

(3) ESL-S - children whose oral English language skills and English reading skills are sufficient for reading in English with support through the explanation of concepts in Spanish

TABLE 3

Study C:

Criterion-Referenced Validity Data Summary

Location	Pupil Origin	Kindergarten		Grade 1		Grade 2		Grade 3		Total	
		N	Corr.	N	Corr.	N	Corr.	N	Corr.	N	Corr.
Texas	Mexican Amer.	---	---	47	.88	48	.71	50	.41	145	.73
Arizona	Mexican Amer.	40	.96	18	.59	35	.82	---	---	93	.87
California	Mexican Amer.	43	.79	40	.77	42	.43	41	.56	166	.68
Tx, Ariz, Cal	All Mex Amer.	83	.93	105	.84	125	.81	91	.51	404	.82
Florida	Cuban	21	.84	18	.90	19	.93	26	.66	84	.83
Tx, Ariz, Cal, Fla	All Mex Amer. and Cuban	104	.92	123	.84	144	.82	117	.51	488	.83
Pennsylvania	Puerto Rican	30	.50	65	.69	52	.70	54	.45	201	.64

Note: All correlations are between teacher ratings and S/ELPS scores of pupil language dominance; Puerto Rican data is kept separate because different teacher rating criteria were employed. Pearson's product moment correlations are reported.

TABLE 4

RATE OF AGREEMENT BETWEEN
TEACHER RATINGS AND TEST SCORES

TEST SCORES	TEACHER RATING: Spanish	Predominantly Spanish	Bilingual	Predominantly English	English
Spanish	59	16	5	0	0
Predominantly Spanish	15	50	36	3	1
Bilingual	8	23	146	31	6
Predominantly English	0	2	10	10	11
English	0	0	0	4	52

(4) ESL-E - children whose language skills are sufficient for reading in English without Spanish support

(5) English - children who can function in a regular English program for academic learning

Validity data for the Puerto Rican group are also separated because differences in the instructional setting may have affected the criterion of oral language dominance (teacher ratings based on instructing the child both in Spanish and in English). The other groups (Mexican American and Cuban American students) were in self-contained classrooms, primarily under the direction of a single bilingual person. The Puerto Rican students were in open classrooms using a team-teaching approach with both Spanish and English speaking teachers. These students were under the direction of more than one person, depending upon the subject area and instructional language. For the purposes of research in establishing test validity, this presented two problems. First, teacher ratings were based on their knowledge of the child's language in relation to the subject area and the language in which that subject was taught. Second, the children had been grouped for instructional purposes using the same classification titles but different criteria, as discussed above. The extent to which these prior groupings and subject area instruction influenced teacher ratings is unknown.

For the Puerto Rican group, instructional groupings were compared with S/ELPS scores using a Pearson's product moment correlation coefficient. For the total group of 201 Puerto Rican students a validity coefficient of .63 was obtained. In addition, a validity coefficient was obtained for instructional groupings and S/ELPS scores for the students at each grade level, kindergarten through third grade. While these data are also presented in Table 3,

it should be noted that the coefficients obtained are somewhat lower than those from the other test sites.

Significant differences between criterion related validity coefficients. Subsequent analysis was performed to test the significance of the differences between the criterion-related validity coefficients obtained for (1) the three Spanish language sub-groups, (2) the four grade levels, and (3) the five sites involved in the study. As expected, the validity coefficients obtained for the Puerto Rican students were significantly different from those obtained for both the Mexican American and Cuban sub-groups (smallest difference = .188; p .05) while there was no significant difference found when the correlations for the Mexican Americans and Cubans were compared with each other. This is undoubtedly due to the difference in the rating systems employed as discussed previously. Given the data that was obtained, it can be stated that the S/ELPS has a high level of criterion-related validity for use with Mexican American and Cuban pupils. Because of differences in classroom organization and data collection methodology, only a moderate level of validity for use with Puerto Rican students has been confirmed. When considering the differences in correlation coefficients by grade level, kindergarten pupils were found to be significantly different from all other grades (smallest difference = .078; $p < .05$), while first and second grade pupils were additionally found to be significantly different from kindergarten (smallest difference = .078; $p < .05$) and third grade (smallest difference = .305; $p < .05$), but not to each other. This would indicate that the S/ELPS is a more valid measure of oral language performance when used with younger children (e.g. kindergarten through second grade). When the difference between the validity coefficients obtained at each site were tested, it was indicated that Arizona and Florida were similar to each other and significantly different from the others (smallest difference = .1; $p < .05$), and Texas was significantly

different from Pennsylvania and California (smallest difference = .057; $p < .05$), while California and Pennsylvania were not significantly different from each other. Thus it is apparent that some factors related to the test sites affected the validity coefficients obtained. Figure 1 illustrates these findings.

Concurrent Validity. Concurrent validity was evaluated by comparing performance on the S/ELPS with performance on another measure of language dominance. A sample of 53 Mexican American children from grades K through three were administered the S/ELPS. These students had been previously tested with The James Test of Language Dominance two months earlier. Approximately equal numbers of students from each grade level participated. Pearson's product moment correlations were computed to determine the degree of agreement between S/ELPS and James scores. This analysis yielded a validity coefficient across all grade levels of .86. Thise results indicate a high degree of concurrent validity when comparing the results of the S/ELPS to that of the James. Table 5 contains a summary of this data.

Reliability Studies. The reliability of the S/ELPS was evaluated by retesting a sub-sample of 326 of the 689 subjects who were administered the S/ELPS. The retested subjects were drawn from each grade from each test site. In evaluating the reliability of the S/ELPS, measures of test-retest, inter-rater, inter-scorer, and intra-rater reliability were collected.

Test-Retest Reliability. Test-retest reliability of the S/ELPS was determined by readministering the S/ELPS to a sub-sample of students at each grade level at each test site (Total N = 326). Students were retested from one to three days following the first test administration. Although students were retested under

Figure 1

Study C: Significant Differences Between

Criterion-Related Validity Coefficients

Variable	Correlation Differences
Language Subgroup:	Mexican American = Cuban < Puerto Rican (r=.82) (r=.83) (r=.64)
Grade Level:	Kindergarten < Grade 1 = Grade 2 < Grade 3 (r=.92) (r=.81) (r=.82) (r=.51)
Test Site:	Arizona = Florida < San Antonio < California = Pennsylvania (r=.87) (r=.83) (r=.73) (r=.68) (r=.64)

Table 5

Study C: Concurrent Validity, Test-Retest Reliability

Interrater Reliability and Intrarater Reliability Data Summary

Test	N	Origin	Grade Level	Pearson Correlation
Concurrent Validity*	53	Mexican American	K-3rd	.86
Test-Retest Reliability	326	Mexican American Puerto Rican, Cuban	K-3rd	.84
Interrater Reliability	153	Mexican American Puerto Rican, Cuban	K-3rd	.87
Interscorer Reliability	90	Mexican American Puerto Rican, Cuban	K-3rd	.97
Intrarater Reliability	173	Mexican American Puerto Rican, Cuban	K-3rd	.81

*comparison of S/ELPS with James Test of Language Dominance

conditions similar to those in the first test administration, in approximately half of the cases, a different examiner retested the student.

A Pearson's product moment correlation was performed comparing the scores of the first test administration to those obtained on the second administration. The results of this analysis yielded a reliability coefficient of .84. Summarization of this data is found in Table 5.

Interrater and Interscorer Reliability. In order to determine the consistency of the S/ELPS scores between different examiners, two methods were employed: First, two examiners tested the same child on two separate occasions (N = 153). Additionally, the test protocols of a sample of 5 subjects at each grade level from each test site were rescored by a different examiner (Total N = 90).

One hundred and fifty-three subjects were rested by a different examiner than had administered the S/ELPS on the first occasion. A Pearson's product moment correlation was used to measure the degree of agreement between the two test scores for each student. This analysis yielded a reliability coefficient of .87. In determining the degree of inter-scorer consistency of the S/ELPS, 90 of the test protocols were rescored after all tests had been administered. Members of the SEDL staff rescored the S/ELPS by reviewing the total protocols. A Pearson's product moment correlation was used to determine the degree of agreement between the test scores and the scores obtained on the rescoring. This analysis yielded a reliability coefficient of .97. Thus, two measures of interrater reliability were evaluated, one related to scorer differences influenced by the administration and scoring of the S/ELPS by two different examiners, and the second related to the score differences influenced only by the rescoring of the

protocol. Summary of the correlational data obtained in this part of the study is found in Table 5. Table 6 is a matrix which depicts this rate of agreement for test-retest reliability with different examiners.

Intrarater Reliability. A sub-sample of 173 subjects were retested on two occasions by the same examiner. Subjects from each grade level at each test site were retested in this condition. As in the condition where subjects were retested by different examiners, subjects in this condition were retested one to two days following the first administration of the S/ELPS. A Pearson's product moment correlation was employed to determine the degree of agreement between the two S/ELPS scores for each individual. This analysis yielded a reliability coefficient of .81. Table 5 includes a summary of these findings, while the rate of agreement matrix of scores from the first administration compared to those of the second administration is portrayed in Table 7. The difference between the correlation coefficients for retest data for same examiner ($r = .81$) versus that retest data for different examiner ($r = .87$) was analyzed to determine if the difference between coefficients was significant. The results of this test indicated that the difference between the correlation coefficients was not significant ($p = .07$).

TABLE 6

Study C:

RATE OF AGREEMENT FOR TEST-RETEST WITH DIFFERENT EXAMINERS BASED ON A SUB-SAMPLE OF 153 SUBJECTS

SECOND ADMINISTRATION \ FIRST ADMINISTRATION	Spanish	Predominantly Spanish	Bilingual	Predominantly English	English
Spanish	24	3	0	0	0
Predominantly Spanish	7	12	9	0	0
Bilingual	3	9	57	5	0
Predominantly English	0	0	3	8	3
English	0	0	0	1	9

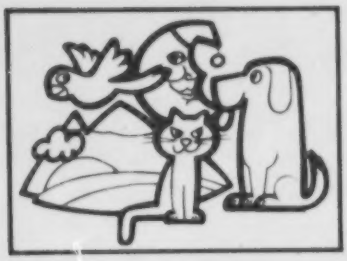
TABLE 7
Study C:
RATE OF AGREEMENT FOR TEST-RETEST WITH SAME EXAMINERS
BASED ON A SUB-SAMPLE OF 173 SUBJECTS

SECOND ADMINISTRATION \ FIRST ADMINISTRATION	Spanish	Predominantly Spanish	Bilingual	Predominantly English	English
Spanish	26	0	2	0	0
Predominantly Spanish	4	20	8	2	1
Bilingual	2	7	68	6	2
Predominantly English	0	1	3	5	2
English	0	0	1	1	12

APPENDIX B

PUBLICITY INFORMATION

CTB/McGraw-Hill
and
Council for Exceptional Children



SPANISH/ENGLISH LANGUAGE PERFORMANCE SCREENING

S/ELPS

a measure of language dominance

Available September 1976

WHAT S/ELPS IS DESIGNED TO DO

The *Spanish/English Language Performance Screening* (S/ELPS) provides an objective measure of a child's stronger or dominant language for initial learning in a bilingual program in Grades K–2 and in day-care centers. S/ELPS was developed at the Southwest Educational Development Laboratory (SEDL) under a grant from the U.S. Office of Education.

BENEFITS PROVIDED BY S/ELPS

S/ELPS offers preschool and primary grade teachers the following:

- a test designed specifically for the classroom teacher
- identification of a child's dominant language and degree of bilingualism
- identification of a child's better language for additional testing
- descriptive case studies and recommendations for instruction
- organization of all assessment materials into a convenient classroom kit
- a simple, quick administration and scoring process
- use of realistic objects for presentation of test items
- less expensive kit than others on the market

COMPONENTS OF S/ELPS

S/ELPS is packaged in a convenient, organized classroom kit that contains the following components:

Manual – contains all directions for administration and use, interpretive information, and technical data in a sturdy, long-lasting, spiral-bound format

Stimulus Pictures – four different, realistic representations in full color, laminated for long wear

Manipulatives – two boxes of toy materials used for administration, as follows:

Box I Cup, plate, spoon, comb, mirror, watch
Box II Baby, bottle with nipple, bed, chair, table, scissors

Record Forms – sufficient report forms for forty students (if duplicates are not required for student records, there are enough forms for eighty student)

Carbon Paper – folder contains five sheets of carbon paper for use with record forms

ADMINISTRATION OF S/ELPS

Any bilingual adult can administer S/ELPS. The test consists of two parts: the Spanish section, administered first, and the English section, administered second. The two sections contain equivalent but not identical items. S/ELPS is individually administered in a single session and is scored at the same time that the answers are recorded. The entire battery takes ten to fifteen minutes to administer and score. The assessment activities have been designed to be interesting and simple for the young child, so that performance depends only on ability to understand and use the language being tested.

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S/ELPS RESULTS

S/ELPS compares a child's performance in one language with performance in the other language. It does not compare children with each other or with a norm group. The results are used to assign children a language category that describes their behavior in both languages. The language categories used in scoring S/ELPS are:

Category 1 – Dominantly Spanish; almost no English
Category 2 – Spanish dominant; knows some English
Category 3 – Bilingual (equal use of both languages)
Category 4 – English dominant; knows some Spanish
Category 5 – Dominantly English; almost no Spanish
Category 0 – Insufficient performance to evaluate

TECHNICAL DATA

The S/ELPS Manual includes a summary of the technical data gathered on this instrument; a full report is available from the Educational Resources Information Center (ERIC). The technical data indicate that S/ELPS is a valid and reliable instrument for use in bilingual education programs.

PRICING INFORMATION

Classroom Kit – Contains a Manual, two boxes of six manipulatives each, one set of four full-color picture cards, and forty report forms each in duplicate, with carbon paper . . . . . $40.00 each

ORDERING INFORMATION

S/ELPS can be ordered from the Order Services Department, CTB/McGraw-Hill, Del Monte Research Park, Monterey, California 93940. Additional information on S/ELPS can be obtained from your nearest CTB/McGraw-Hill Regional Office listed below:

EASTERN	1221 Avenue of the Americas, New York, NY 10020 (212) 997-4866-7
SOUTHERN	100 Colony Square, Suite 1801, Atlanta, GA 30361 (404) 892-2868
MIDCONTINENT	Manchester Road, Manchester, MO 63011 (314) 227-1600
WESTERN	3200 Wilshire Blvd., South Tower, Los Angeles, CA 90010 (213) 487-1160

6/76 M0241

The Spanish/English Language Performance Screening–

S/ELPS

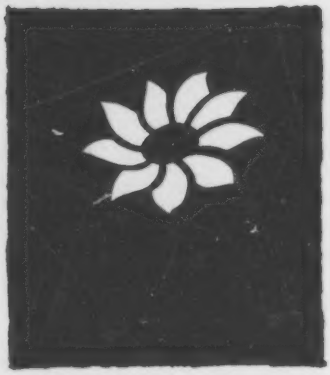
an effective measure of language dominance.

The Spanish/English Language Performance Screening–

S/ELPS

an effective measure of language dominance.

"The children enjoyed S/ELPS. It was like a game t



THE NEED FOR S/ELPS

In the past, few teachers of bilingual programs knew exactly where to begin instruction. They were not sure whether to teach in English or Spanish, since each child's language background differed. A bilingual child often spoke a language with relative ease, yet had great difficulty learning in that language. Without knowing each child's dominant or stronger language, teachers run the risk of doing irreparable damage to children's educational progress. Now, with S/ELPS, teachers have an easy way of determining each child's dominant language for beginning instruction.

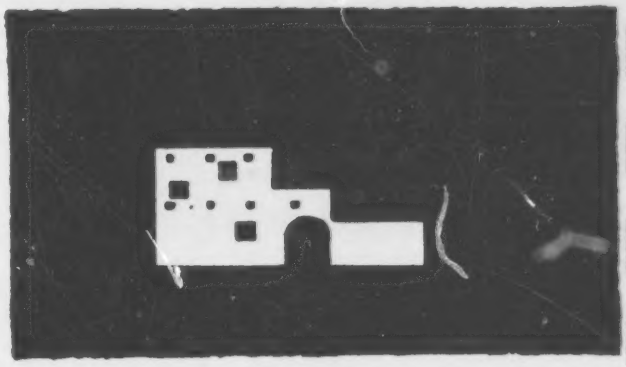
"It helped me find out why some of the children were having problems learning. They didn't understand a certain language."

S/ELPS was developed at the Southwest Educational Development Laboratory (SEDL) under a grant from the U.S. Office of Education to investigate bilingual screening methods and to devise an effective instrument in this area. S/ELPS was extensively field-tested and validated by SEDL, and technical data showing S/ELPS to be a reliable and valid instrument for use in bilingual education programs is published in the Examiner's Handbook.

HOW S/ELPS WORKS

S/ELPS provides an objective measure of a bilingual child's dominant language and the degree of bilinguality in the second language, without the requirement of an extended period of observation. Children can then be easily grouped by S/ELPS classifications for instruction.

Specifically designed for the classroom teacher, S/ELPS is simple and quick to administer and score. Screening procedures are informal, and the screening takes about fifteen minutes to administer



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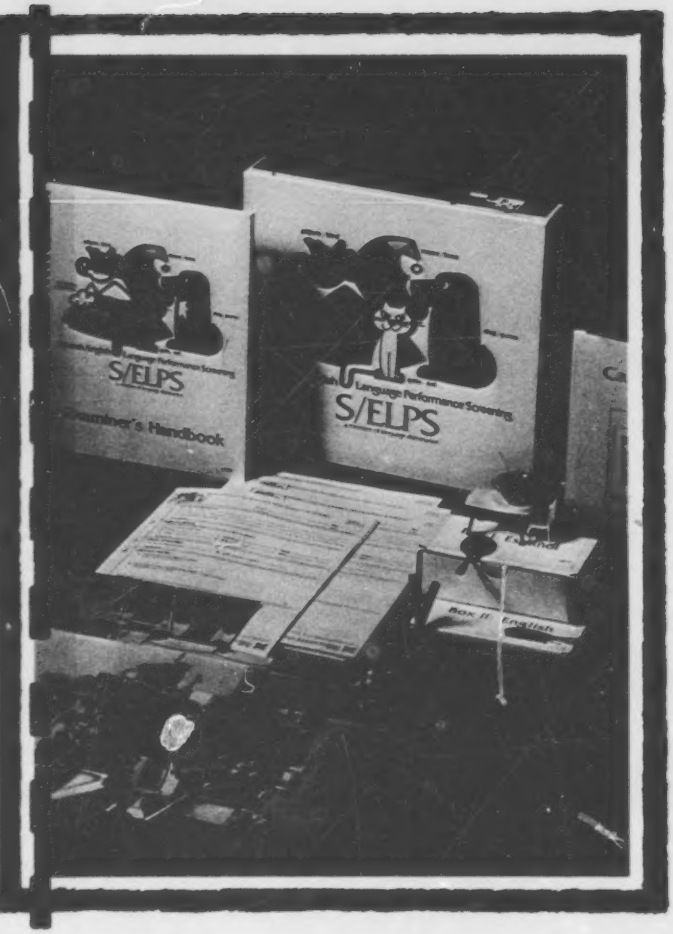

and score. The activities have been designed to be interesting and easy for the young child, to ensure that performance depends only on the ability to understand and use the language being tested.

"I really enjoyed the manual. I was not aware or did not believe that many Mexican-American children did not know what some objects were called in Spanish. I don't think this manual could be improved more. It is well planned and prepared to use."

The manual (Examiner's Handbook) explains the screening procedures, scoring process, use of S/ELPS for instruction, and the technical data behind the instrument. The screening may be administered by any bilingual person who is experienced in working with young children.

QUOTES ARE FROM ACTUAL TEACHER COMMENTS ON S/ELPS

S/ELPS OFFERS REAL BENEFITS

- a test designed specifically for the classroom teacher
- identification of a child's dominant language and degree of bilingualism
- identification of a child's better language for additional testing
- descriptive case studies and recommendations for instruction
- organization of all assessment materials into a convenient classroom kit
- a simple, quick administration and scoring process
- use of realistic objects for presentation of test items
- less expensive kit than others on the market

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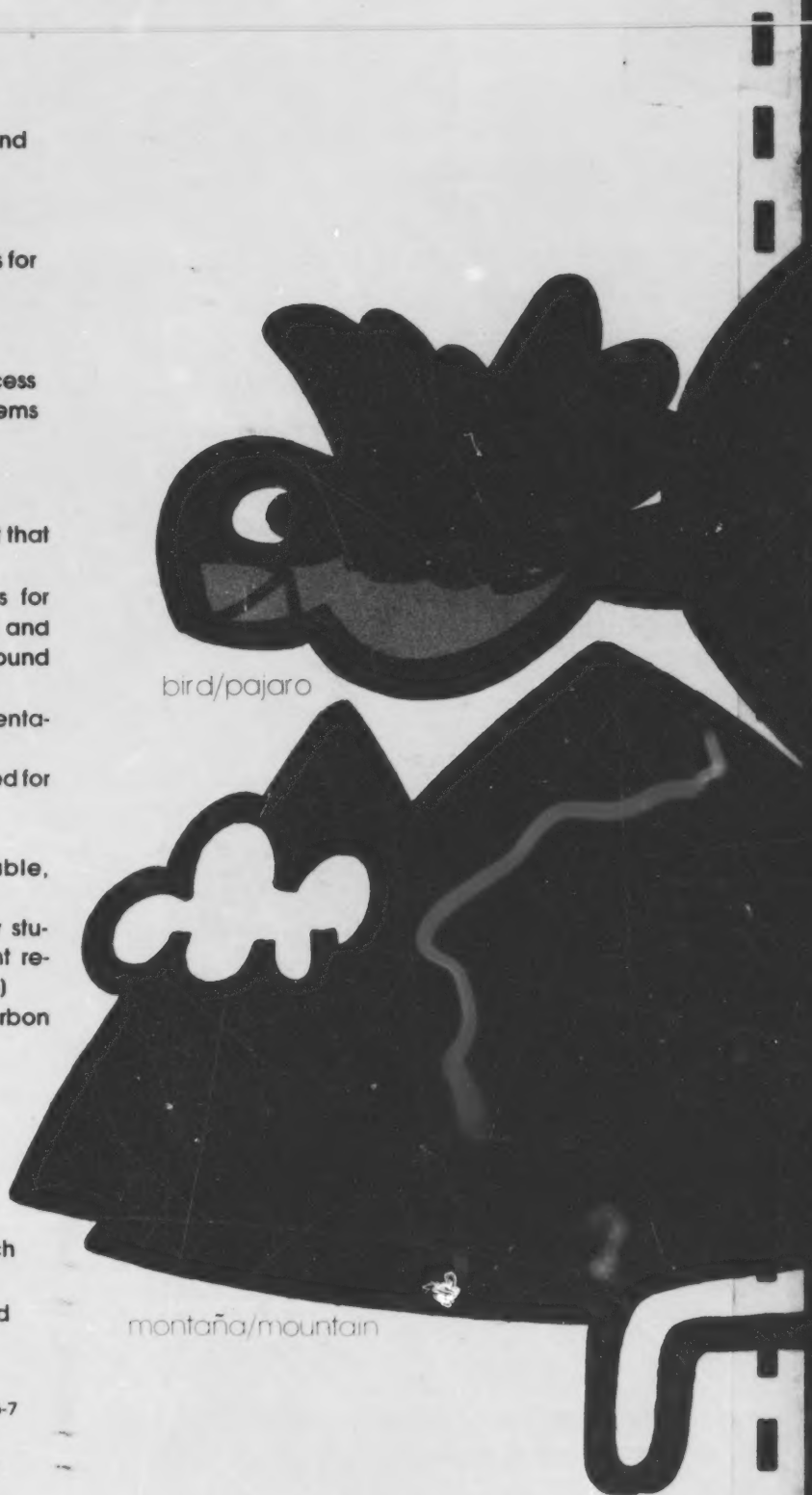

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CEC CATALOG

1976-77

PUBLICATIONS AND NONPRINT MEDIA

Revised January 1977

The Council for Exceptional Children

No. 130 **How to Fill Your Toyshelves without Emptying your Pocketbook: 70 Inexpensive Things to Do or Make.** Southwest Educational Development Laboratory. A collection of games, activities, and instructions for making inexpensive learning equipment from inexpensive and recycled materials for preschool handicapped and nonhandicapped children. For home use by parents as well as for classroom activities. Multisensorial—modality visual, auditory, for older groups motor, touch and smell, and language and concept development. Illus. Also available in Spanish. 1976. 62 pp. **$3.95**

No. 134 How to Fill Your Toyshelves . . . Spanish language edition. **Como Llenar Sus Estantes Con Juguetitos Sin Gastar Mucho Dinero.** 1976. 62 pp. **$3.95**

NEW

***No. 132* Working with Parents of Handicapped Children.** Southwest Educational Development Laboratory. Designed to help teachers understand and work with parents of young children with disabilities. Helpful ideas on how to prepare and conduct meetings with parents. Followup suggestions on helping parents to observe in the classroom and supplement activities at home. Information sources, bibliographies. Prototype forms for parent interviews are included. Also available in Spanish. 1976. 46 pp. **$3.25**

No. 133 Working with Parents of Handicapped Children—Some Ideas. pp. see no. 132. **Trabajando Con Los Padres De Ninos Con Impedimentos.** 1976. 46 pp. **$3.25**

***No. 131* Guidelines for Personnel in the Education of Exceptional Children.** Project Director: Jean B. Hebeler, Maynard C. Reynolds. Designed to help develop and maintain the competencies and understandings necessary for paraprofessional, undergraduate, and graduate levels of preparation and performance. Recruitment and selection, preparation programs, criteria for licensure. From the Professional Standards and Guidelines Project of CEC. 1976. 56 pp. **$3.50**

***No. 149* Casebook of Professional Practices in Special Education.** A companion volume to *Guidelines for Personnel in the Education of Exceptional Children*. Provides possible applications of the policies and guidelines contained in *Guidelines*, and is intended to encourage the exchange of information as a basis for the improvement of policy and practices. From the Professional Standards and Guidelines Project of CEC. 1976. 160 pp. **$4.00**

APPENDIX C

SUPPLEMENTARY MATERIALS: ENTRY LEVEL CHECKLISTS

ENTRY LEVEL CHECKLISTS

Purpose

During the first weeks of school, you will be spending much of your time planning, organizing, setting up centers, establishing routines, and becoming acquainted with the children. Informal observations will be taking place throughout this time period, and from them, you will form opinions and make decisions on scheduling, grouping children, teaching methods indicated, etc.

The Entry Level Checklists include specific behaviors which are very basic to the child's overall level of functioning in the kindergarten. There are two checklists (one for days 1-5 and another for days 6-10) to be completed after each individual child has attended five and ten days. This allows time for the child to become familiar with school setting, routines, teachers and other children. Each checklist covers five categories of behavior (behavior which the majority of children should exhibit fairly consistently upon entering kindergarten). Included in each category is a desired entry level behavior with two or three behaviors which indicate the child's level of functioning as opposed to the level on which you would like the child to function.

The Entry Level Checklists do not only structure your observations, but also provide a simple method of recording what is observed. In addition, the checklists include all children on one form. They will supply you with four types of information:

1. Identification of those children who are fairly self-sufficient and ready for group learning.

2. Identification of those children who need some additional help to reach the kindergarten-readiness level.

3. Identification of specific areas of difficulty for each child.

4. Reference to an Information Card which provides suggestions for remediation.

From this information, you will immediately pinpoint difficulties, be able to begin remediation, and will prevent major problems. Use this information to group children who are weak in one behavior with those who are strong and are good models of the desired behavior.

Instructions for Completing Checklists

1. Review the checklists so that you will be aware of the behaviors to be observed.

2. After a child has attended school five days, complete Entry Level Checklist I, placing a check mark beside the behavior which best

describes what the child does in each of the five categories indicated.

3. Refer to the Information Card indicated in the box beside the behavior checked.

4. After the child has attended ten days, repeat the above procedure to complete Entry Level Checklist II.

5. Checklists I and II should be completed for all children who have attended kindergarten for the required number of days prior to the second month of school.

ENTRY LEVEL CHECKLIST I (DAYS 1-5)

OBSERVATIONS	CHILDREN'S NAMES	See Card
1. TAKES CARE OF TOILETING NEEDS INDEPENDENTLY		I-67
Indicates need but requires assistance		I-69
Wets or soils pants		
2. REQUIRES LITTLE OR NO ASSISTANCE AT MEALTIME		I-7
Needs constant attention		I-16
Wants to eat from other child's tray, trades or takes food home		I-15
Is awkward, spills		
3. RESPONDS TO AND FOLLOWS SIMPLE INSTRUCTIONS (e.g., Get in line. Go to the art table.)		I-2
Responds but does not follow		I-47
Does not respond at all		
4. INTERACTS WITH ADULTS AND CHILDREN		I-32
Does not interact, even when approached		I-22
Clings to teacher		
5. COOPERATES IN TEACHER-DIRECTED GROUP ACTIVITIES		I-7
Requires constant attention		I-24
Bothers other children in group		I-4
Does not stay with group		

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162

ENTRY LEVEL CHECKLIST II (DAYS 6-10)

OBSERVATIONS	CHILDREN'S NAMES	See Card
1. FOLLOWS DAILY ROUTINE WITH MINIMAL DIFFICULTY		
Needs constant direction		I-7
Gets lost from group frequently		I-17
Does not follow commands of teacher		I-2
2. BEGINNING TO INITIATE INDEPENDENT ACTIVITY		
Imitates other children		I-47
Engages in activities at teacher's suggestion only		I-32
Refuses to engage in activity even after being encouraged		I-4
3. CHANGES ACTIVITIES EASILY AND INDEPENDENTLY		
Refuses to change		I-2
Is disruptive (i.e., pushes, hits, yells)		I-24
Changes too frequently		I-29
4. WORKS INDEPENDENTLY AT ASSIGNED GROUP ACTIVITY FOR A PERIOD OF 10-15 MINUTES		
Needs constant attention		I-7
Uses equipment/materials inappropriately		I-29
Does not do assigned activity		I-13
5. COOPERATES (MOST OF THE TIME) DURING GROUP ACTIVITY		
Participates inappropriately		I-25
Refuses to participate		I-4
Refuses to replace equipment/materials		I-11

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APPENDIX D

SUPPLEMENTARY MATERIALS: HOME ACTIVITIES

HOME ACTIVITIES

I. Introduction

Teachers and other staff who work with parents will want to do everything possible to meet the special needs of the child with a problem. If a child in your classroom has a disability that could keep him or her from doing his or her best, you will want to work closely with the parents. Working together, you and the parents can try to keep whatever problem the child may have from seriously affecting learning and development.

The Supplementary Home Activities are designed to be used along with the Supplementary Classroom Activities of the Bilingual Kindergarten Program (BKP). The Supplementary Home Activities are divided into four skill areas, Visual, Motor, Auditory, and Ideas and Concepts, the major components of the Bilingual Kindergarten Program, and are designed to supplement classroom instruction in these areas. For example, if a child has a visual problem, and is having difficulty with the Visual Lessons of the Bilingual Kindergarten Curriculum, you would send home Visual home activities.

II. What Is Included

The Supplementary Home Activities include four Home Activities sheets for the first nine units of the BKP. These are for the following skill areas:

Auditory	Visual
Motor	Ideas and Concepts

Each Home Activity sheet includes three to five activities and instructions for making a home learning item. The activities are simple

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and materials are listed which can be found around the house.

At the end of each activity sheet is a feedback form which should be completed by the parents, cut off, and returned to you. This gives the parent a way of reporting back to you and gives you a means of noting problems which the child or parents may be having in doing the activities.

III. When To Use The Supplementary Home Activities

Once a child has been identified as having problems in a particular area of development (visual, motor, auditory, ideas and concepts), it is important to meet with the parents and let them know that their help is important. Explain to the parents that there are activities which they can do at home to help the child learn.

IV. Instructions To Parents

Tell the parents that you will be sending activities home about once every two weeks, and that these activities will be easy to do, should not take more than ten minutes, and will not require any expensive materials. The materials should be easy to obtain (things usually found around the house) or easy to make.

Remind the parents that the activities should be enjoyable for parent and child, and that it is not necessary to complete all the activities. The parents can choose the activities they prefer. Or perhaps you could mark the ones which you feel would be most helpful for the child.

Instruct the parents to help the child, as necessary, in doing the activities. Explain that many of the activities will need to be repeated several times before the child will be able to complete them without help.

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V. How To Use

A. Select the appropriate skill area - the component of the Bilingual Kindergarten Curriculum in which the child is having difficulty.

Auditory Visual

Motor Ideas and Concepts

B. Select the Supplementary Home Activities for that component. Be sure the Unit number matches the Unit of the BKP you are teaching or one you have completed.

C. Read the activity sheet before giving it to the parent.

1. Select the activities which would best suit the child's needs.
2. Circle those activities which you want the parent to do with the child.
3. Ask the parent to complete the activities and to fill in the feedback form at the bottom of the activity sheet. (The form should be cut along the dotted line and returned to you.)
4. Instruct the parent to be as thorough as possible when completing the form and to note any problems so that together you can learn the best ways of working with their child.

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HOME ACTIVITIES

1. ATTENDING TO SOUNDS - Listen to different kinds of music with your child. Talk with the child about the music, whether it is fast-slow, about which he or she likes best and why. If you have a record player, check out children's records from the public library. Visit the library with your child and let him or her choose a record to take home. Play a record fast/slow, or loud/soft. Have the child imitate you as you clap to the speed or loudness of the music. You can do the same activity with a toy drum. Point out sounds to the child as you go about your daily chores. Call attention to everyday sounds. For example: the doorbell, the telephone ring, the sound of water dripping, the sounds of different appliances, or an airplane.

2. LOCATING SOUND - Increase your child's awareness of the direction or location of sound. Stand in one corner of the room. Tell your child to stand in the middle and to listen as you clap your hands or ring a bell. Move to another corner and repeat the sound. Tell him/her to point in the direction of the sound. Ask another child, or another adult, to play a game with you. Tell the child to stand in the middle (blindfold the child) as you and the other person take turns clapping. Tell the child to point in the direction where the sound was made. (You may have to demonstrate this at first.)

3. IDENTIFYING SOUNDS - INSIDE - Make different types of sound such as those listed. Name the sounds and help your child imitate you.

   clapping sneezing
   coughing singing

   Using objects found around the house (i.e., spoons, pans, scissors, a mixer, an alarm clock, a whistling tea kettle), have the child listen as you make different sounds. Later, play a game in which the child listens without looking as you make a sound and then shows you which object made the sound.

4. IDENTIFYING SOUNDS - OUTSIDE - Go for a walk and help the child listen for and identify the sounds of birds singing, cars passing, horns blowing, etc.

MAKE AND DO - LISTENING TUBS

Fill eight margarine tubs with plastic lids with four different materials. For example: two with flour, two with buttons, two with nails, two with pins. Have your child shake the tubs and match the ones that sound alike.

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EVALUATION - AUDITORY I

	Attending to Sounds	Locating Sound	Identify Sound-In	Identify Sound-Out	Make & Do
We did Activity					
I had problems: finding materials					
understanding activity					
explaining activity					
My child liked activity					
My child did not like					
My child had difficulty with					

Write other comments or suggestions for change on back of page.

Child's Name _____ Age _____

HOME ACTIVITIES

1. RHYMING - To help your child understand rhyming, explain, "I'm going to say some words that sound alike." Say, "bee, dee, tee, see, fee." Then tell your child to repeat each word after you. Say:

   bee, dee, tee, see, fee bat, hat, cat, sat, rat

   doo, moo, koo, loo, boo no, so, lo, go, po

   If this activity seems easy for your child, you can expand it by saying each row of rhyming words and asking the child to think of more words that sound alike.

2. ATTENTION AND MEMORY - To improve listening and memory, choose a simple story your child likes and help the child learn to tell the story. Read or tell the story several times during the week. Encourage your child to say the words with you. Stop during the story to ask, "What happened next?" and allow your child to answer. Gradually reduce the amount of talking you do, so that the child is telling the story and you are filling in the missing parts.

3. MEMORY - Help your child learn the names of objects. Look through a catalogue or magazine with your child and tell him or her to listen as you name two objects you see in the picture (choose objects the child is already familiar with). Tell the child to find the two objects you named.

4. LISTENING - Help your child learn to listen and to follow instructions by playing a game with your child while working in the garage or outside. Tell your child to listen as you hammer one time. Tell the child to hold up one finger, because you hammered once. Then hammer twice and have the child hold up two fingers. Repeat until you feel the child understands when to hold up one finger or two fingers. Then tell the child to turn so that he/she cannot see you. Say, "Listen carefully. When you hear me hammer one time, hold up one finger. When you hear me hammer two times, hold up two fingers."

MAKE AND DO - RHYMING GAME

Make a rhyming card game. Cut out and paste on 3" X 5" cards pictures of rhyming words such as the following:

cat - hat key - tree
bug - rug man - can

Name each picture. Spread the cards on the table and tell the child, "I'm going to name one picture. I want you to find a picture of the word that sounds like the one I name." You may have to help the child at first. For example, if the child does not answer when you say find the one that sounds like cat, say, "Does hat sound like cat?" Or give the child a choice between only two pictures. Again, you may need to say the words for the child at first.

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EVALUATION - AUDITORY 5

	Rhyming	Attention & Memory	Memory	Listening	Make & Do
We did Activity					
I had problems: finding materials					
understanding activity					
explaining activity					
My child liked activity					
My child did not like					
My child had difficulty with					

Write other comments or suggestions for change on back of page.

Child's Name _____ Age _____

HOME ACTIVITIES

1. BODY COORDINATION - To improve large muscle development and coordination, help your child:
   jump up and down
   jump over a line or piece of tape on the ground
   jump over a rope held one inch, two inches, three inches from the ground
   NOTE: If your child has difficulty jumping, hold his or her hand and jump with the child. Help your child jump down from a low step or small stool. It often takes practice before a child is able to jump without help.

2. PLAY BALL - Tell your child to sit on the ground with his or her legs spread apart. You sit facing your child about 3 feet away. Roll the ball to each other. Change the game by rolling the ball as quickly as you can to each other. Alternate rolling the ball slowly three or four times and switching to fast.

3. WALKING BOARD - Find a long narrow board (about four inches wide and four or five feet long). Give your child an umbrella and tell him or her to pretend to be walking a tight rope. Hold your child's hand if necessary, but encourage him or her to walk alone. This is also very good for balance.
   If a board is not available, tape masking tape to the ground, draw a line on the ground with chalk, or tie bricks to either end of a six foot rope.

4. POTATO WALK - Give your child a large cooking spoon with a potato on it, and tell the child to walk as far as he or she can without dropping the potato. Mark the place where the potato drops each time, and encourage the child to go farther each time.

MAKE AND DO - STEPPING STONE

From cardboard, cut out 20 round or oval shaped pieces approximately 6" X 6" to use as "Stepping Stones." You or your child can place them in various patterns (about 9" apart). Show the child how to tiptoe from one "stepping stone" to the next.

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EVALUATION - MOTOR 2

	Body Coordination	Play Ball	Walking Board	Potato Walk	Make & Do
We did Activity					
I had problems: finding materials					
understanding activity					
explaining activity					
My child liked activity					
My child did not like					
My child had difficulty with					

Write other comments or suggestions for change on back of page.

Child's Name _____ Age _____

HOME ACTIVITIES

1. SORTING OBJECTS - Help your child to sort objects. Gather several items of three different types, such as beans, macaroni, beads, or buttons. Place all the items in a cottage cheese or butter container. Give your child the container and a divided TV dinner tray or a three-sectioned paper plate. Tell your child to select objects from the container and put all the ones that are alike in the same section of the tray.

2. SORTING COLORS - Help your child to match and sort colors. Cut or tear several pieces of colored paper (four different colors) and put in a bowl. Divide a sheet of white 8 1/2" X 11" paper into four sections. Tell your child to paste all of the like colored pieces in the same section of the paper.

3. MORE MATCHING AND SORTING - Gather several small objects of different colors (i.e., buttons, beans, plastic forks/spoons, beads, colored cereal). Have your child sort these by placing all like objects in one bag, box or other container. Repeat the game by having the child place all objects of the same color together.

4. LOOKING FOR DETAIL - Help your child focus and attend to detail in pictures. Cut out a circle or square from the center of a piece of paper to make a "window." Put the paper "window" on top of a picture. Talk about what the child can see. Cut "windows" in several places on another sheet of paper. Place the different paper over the same picture. Talk about what the child can see now that he/she didn't see before.

MAKE AND DO - CRACKER SHAPES

Gather crackers of different shapes: oyster or Ritz (circle), saltines or wheat thins (square), graham (rectangle), Town House (oval), and Triangle. With a pen or magic marker, trace one of each of the different shaped crackers on a white styrofoam tray (the kind in which meat is packaged). Tell your child to match the crackers to their outlines (child will place the round cracker on the circle, the triangular cracker on the triangle, etc.)

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EVALUATION - VISUAL 3

	Sorting Objects	Sorting Colors	More Matching	Looking for Detail	Make & Do
We did Activity					
I had problems: finding materials					
understanding activity					
explaining activity					
My child liked activity					
My child did not like					
My child had difficulty with					

Write other comments or suggestions for change on back of page.

Child's Name Age

HOME ACTIVITIES

We are now studying a unit on clothing. We are learning the names of various clothing articles and the part of the body on which they are worn. We are also learning about when and for what purpose, different articles of clothing are worn. For example, coats are worn in the winter, when it is cold. Coats keep us warm. You can help your child name and describe clothing.

1. Talk to your child as the child is dressing. Name each article, have the child repeat. Talk about the color and size. Talk about where (on what part of the body) each article of clothing is worn. For example, "Oh, I see you've got your brown socks. We wear socks on our feet."

   Before telling the child the name or where a piece of clothing is worn, ask the child to tell you. If the child doesn't answer or doesn't know, let the child choose from two answers. For example, "Is this a shirt or pants?" If you must answer for the child, have the child repeat the answer. Also, describe the clothing. For example, "This shirt has a bear on it." or "These pants have a zipper." or "Look at the pretty green buttons on this dress."

2. Find pictures in magazines of people dressed for different types of weather. For example:
   Warm weather-a child or children in swim suits or sun suits.
   Cold weather-people in coats, sweaters, hats, gloves, boots, etc.
   Rainy weather-people in raincoats, boots and carrying umbrellas.
   Paste the pictures on construction paper. Look at the pictures with your child and talk about what the people in the pictures are wearing and why. For example: "Oh, that girl has a sweater on because she is cold." or "It's warm and those children are wearing swim suits so they can go swimming." or "It's raining so they need their boots and raincoats."

3. Pack a suitcase for a pretend trip. Gather various clothing items. Encourage your child to name and describe them as he or she puts them into the suitcase.

4. Using the clothing items gathered for activity number 3, play a travel game. Say, "I'm going to the North Pole where it will be cold and wet. What will I need to take with me?" Have your child choose 3 or 4 items suitable for cold weather (hat, gloves, boots, coat, sweater, etc.). Vary the activity by "going to Florida (warm climate)," "going out in stormy weather," etc.

MAKE AND DO - CLOTHING PICTURES

Draw outlines, on several pieces of paper, of different articles of clothing. For example: a dress, a shirt, pants, a coat, a shoe, etc. Give your child a bottle of glue and scraps (i.e., old buttons, glitter, pieces of yarn, beads). Let the child decorate the pictures.

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EVALUATION - IDEAS AND CONCEPTS 4

	1	2	3	4	Make & Do
We did Activity					
I had problems: finding materials					
understanding activity					
explaining activity					
My child liked activity					
My child did not like					
My child had difficulty with					

Write other comments or suggestions for change on back of page.

Child's Name _____ Age _____

APPENDIX E

SUPPLEMENTARY MATERIALS: MEDIA EXAMPLES

(H)

K-11-AUDITORY (c)

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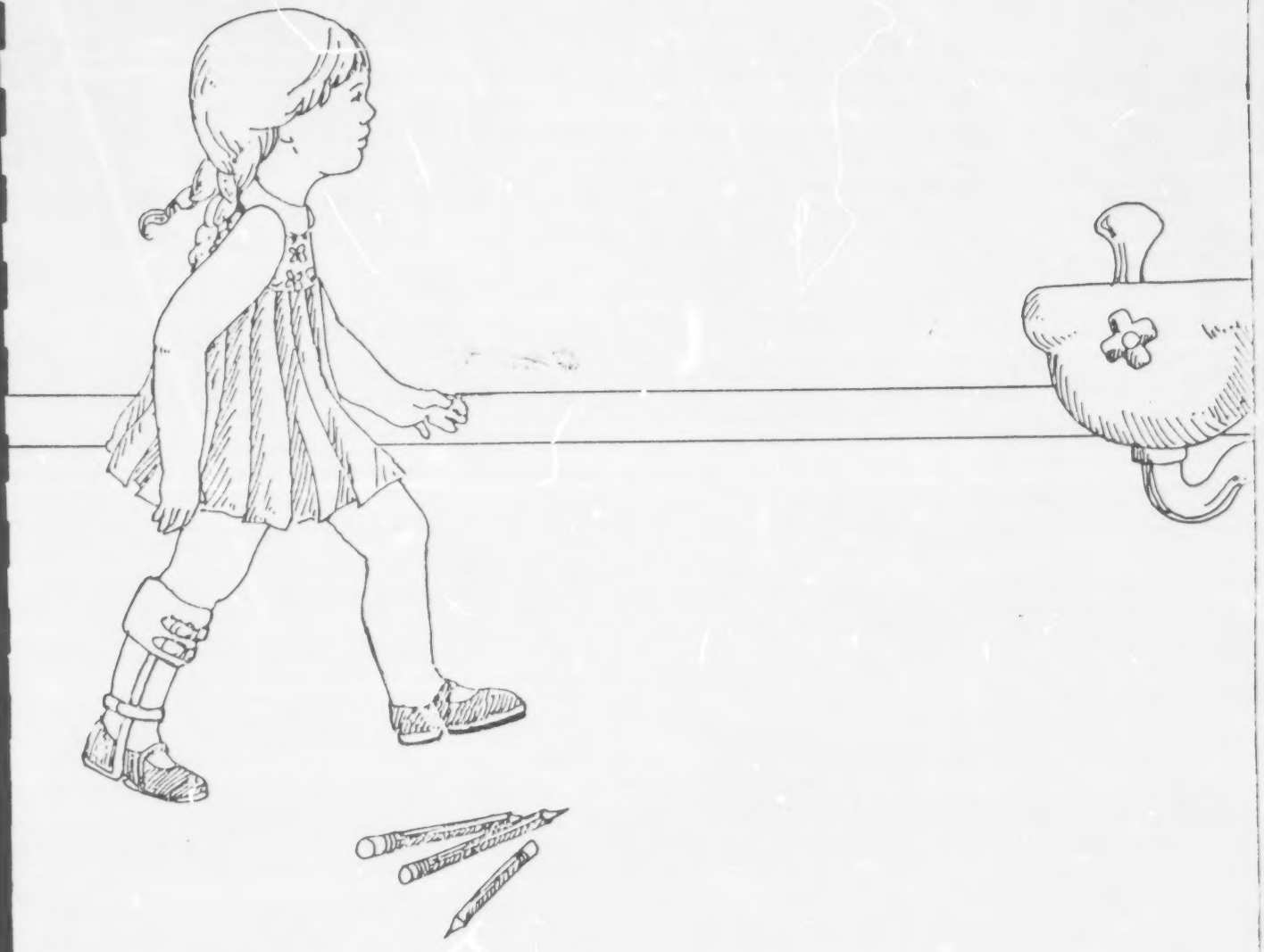

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APPENDIX F

FORMATIVE FEEDBACK FROM TEACHERS AND ASSISTANT TEACHERS
USING THE SUPPLEMENTARIES

FORMATIVE FEEDBACK FROM TEACHERS AND ASSISTANT TEACHERS USING THE SUPPLEMENTARIES

1. On the average, how many times during the week have you used the Supplementary Activities and with how many children.

   a. Observation Cards - "Twice a day with twenty seven children."

   "Approximately 20 times, If I started the unit."

   "All the time with all the children."

   "Fifteen times."

   "Once a week"

   "Four to five times with 6 to 8 children."

   "Never."

   b. Information Cards - "Twice with 5 children."

   "Once with 3 children."

   "Three times with 6 to 8 children."

   c. Activity Cards - "As much as twenty times if I'm starting a new unit."

   "Three to five times."

   "Once a week."

   "Not too often."

   "Four to five times with 6 to 8 children."

2. Should any parts (Initial Checklists, Observation, Information, Activity Cards) be omitted? Which ones?

   "No."

   "No. I feel experienced teachers need an activity box more on their level. Present activity box exhibits what experienced teachers have applied throughout the year."

   "The activity cards are not very original."

   "Activity Cards need more study. Need better solutions for different problems."

3. What is your opinion of the general organization of the Supplementary Activities: Please list any suggestions for reorganization.

"The Supplementary Activities are good except for the Activity Cards. More originality or better solutions are needed."

"To me, it is very helpful. Sometimes I don't know where there is a problem. I look at the Observation Cards and I can tell where they need help."

"Organization is easy to use."

"Add information to Observation Cards."

"Organization is very good. It is the solution that is not very original."

"Good organization and simple to use. Good follow ups."

4. What is your opinion of the format of each part? Please describe any suggestions for change or particular strengths.

a. Initial Checklists

"Good."

"Very good."

b. Observation Cards

"Very Good."

"The back should have some activities listed which teachers can briefly glance at and do while group is at table. Also, teacher can jot down games or activity she does."

c. Information Cards

"Very good."

"Serves as refresher. Teacher has opportunity to recall information she has forgotten."

d. Activity Cards

"Very good."

"Good."

5. What is your overall opinion of the Supplementary Activities as an addition to the Bilingual Kindergarten Program?

"Very helpful."

"Complements the program."

"Good ideas and has been somewhat helpful when found the time and appropriate occasion."

"Very good."

"Excellent."

"I think it should be part of the curriculum to expose teachers to different ideas."

"Good."

6. Would you recommend the Supplementary Activities to other teachers of the Bilingual Kindergarten Program? Why?

"Yes. If you are a new teacher or unfamiliar with the program it comes in very handy."

"Yes. Because the different ideas provided help teachers vary from every day methods used.

"Yes. It would help a teacher get a better introduction to the program."

"Yes. It helps with the lesson especially with some children."

"Yes. Activities are not hard, and they are at your fingertips."

7. Do you feel the time spent using the Supplementary Activities aided your overall teaching?

"Yes."

8. In what ways did you use the Supplementary Activities? Please check. Star the one way in which you used them most.

As remedial activities for children who did not do the regular lessons.
selected 9 times out of 12

As reinforcement activities for children who needed more instruction
selected 7 times out of 12

As alternate activities to substitute for the basic curriculum.
selected 5 times out of 12

As additional activities for children who enrolled late.
selected 5 times out of 12

As expansion activities to add to the basic curriculum.
selected 3 times out of 12

APPENDIX G

SUPPLEMENTARY ACTIVITIES: CONSULTANT REVIEW

REVIEW OF SUPPLEMENTARY ACTIVITIES

The following report will provide an evaluation of the Supplementary Activities - Level K. General suggestions for modification will be included. Other specific revisions, additions and deletions have been provided on the activity cards themselves.

Format and Style

The placement of the Activities on color-coded cards facilitates identification and retrieval of information. Although the system of referencing from one set of cards to another appears complex initially, the system is easily managed after some familiarity is established.

The manner in which the information is organized is consistent in the majority of the activities; however, several of the cards do not adhere to the basic format and need to be reorganized. That is, most of the cards initially prompt the teacher to look for causes of the child's failure in the environment and encourage informal assessment before providing specific remedial techniques. Information on all cards should be organized in this manner for consistency and because this is a more positive approach which allows the teacher to analyze the interaction of child and environment rather than focusing solely on the child's deficit. The cards then are not only "activity cards" but also cards which provide diagnostic information and suggestions and techniques for management of the classroom environment to facilitate learning.

Titles provided for each activity card need to be checked and be made parallel. Although the great majority of the cards are organized so

that each number represents a separate and free-standing activity or suggestion, a few need to be regrouped (i.e., 1, 2 & 3 combined) so that the information needed for completion of one activity does not appear on several items.

The cards are written in simple, easily understandable language. The information concisely presented and generally non-ambiguous. In a number of cases, however, a statement is made which needs to be expanded to include a clarification of how the item is related to the goal specified at the top of the card.

Evaluation of Content

The quality of the task-analysis on the activity cards is generally adequate and in many cases (especially the last one-third of the cards) is quite excellent. Application of child development and learning theories is very evident. Although a few changes concerning the appropriateness of a suggestion for the remediation of a given deficit area are needed (i.e., delete a sound discrimination activity for improvement of sound localization), the great majority of the suggestions are appropriate to the area specified. Furthermore, almost all of the activities utilize materials which are easily obtainable by classroom teachers.

Utility of Supplementary Activities

Each card contains a great deal of information necessary for teachers of young children. The idea of providing several suggestions and approaches instead of concentrating and elaborating on one suggestion, provides the teachers with several alternatives when faced with a child who cannot succeed in the regular curriculum.

Many teachers, especially those who are inexperienced, find it difficult to pinpoint the possible sources of a child's problem and to break down a task in order to facilitate teaching. The activity cards address themselves to both these difficulties and do so without requiring the teacher to read an excessive amount of information. The activity cards provide a framework by which a teacher can increase his/her awareness of the interaction of a child and his home and school environment and the importance which this has on learning. Observation skills and skills in individualized instruction can also be enhanced if the supplemental activities are utilized effectively.

Elena Cano Luderus

Elena Cano Luderus

May 27, 1977

Date

APPENDIX H

PROJECT DISSEMINATION MATERIALS

THE ABILITY DEVELOPMENT PROGRAM

The purpose of the Ability Development Program is to develop and test materials which will help teachers of the Bilingual Kindergarten and Early Childhood Programs in working with children who are also handicapped. Products under development include classroom assessment instruments, supplementary activities for children, and information manuals for teachers and parents.

SPANISH/ENGLISH LANGUAGE PERFORMANCE SCREENING (S/ELPS)

The S/ELPS provides the classroom teacher with an objective means of identifying the child's stronger language for classroom instructional purposes. It may also be used to identify the child's better language for additional testing. The S/ELPS requires about ten minutes to administer. The S/ELPS kit includes recording forms, pictures, objects, and a detailed manual.

OBSERVATION CHECKLIST FOR REFERRAL (OCR)

The OCR is designed to assist the classroom teacher in identifying those children in need of referral for additional testing and/or medical evaluation. The OCR includes a manual and recording forms for a General Checklist and six Specific Checklists for the areas of health, vision, hearing, speech, motor, and social/emotional development.

(English and Spanish versions)

WORKING WITH PARENTS OF HANDICAPPED CHILDREN

Written as a guide for teachers with little formal training in working with parents of handicapped children, this manual is designed to develop awareness of the feelings and reactions of parents. In addition, planning for parent interviews and parent observations, and lists of other resources are included.

(English and Spanish versions)

HOW TO FILL YOUR TOY SHELVES WITHOUT EMPTYING YOUR POCKETBOOK

This manual includes detailed directions on how to make inexpensive instructional materials for home or classroom use. Suggestions for specific activities as well as instructions for conducting a Parent-Teacher materials workshop are included.

(English and Spanish versions)

SUPPLEMENTARY CLASSROOM ACTIVITIES

The Supplementary Activities are designed to be used in conjunction with the Bilingual Kindergarten or Early Childhood Programs previously developed by the Southwest Educational Development Laboratory. Observation Cards and Activity Cards are designed to provide the teacher with a means of identifying the specific educational needs of individual children.

The Ability Development Project is funded by Bureau of Education for the Handicapped, U.S.O.E.-H.E.W., Grant G00-75-00592.

For additional information contact:

Dr. Joyce Evans
Director - Division of Special Projects
Southwest Educational Development Laboratory
211 East 7th
Austin, Texas 78701

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(English and Spanish versions)

Southwest Educational Development Laboratory
211 East 7th Street
Austin, Texas 78701

Center/School District

(Mailing Label)

THE ABILITY DEVELOPMENT PROGRAM

SPECIAL PROJECTS
Southwest Educational Development Laboratory
Austin, Texas

200

THE ABILITY DEVELOPMENT PROGRAM

New products--
Designed for teachers using the Bilingual Kindergarten Program (SEDL, 1972), with some of the materials helpful for teachers using other curriculum;
Tested in kindergarten classrooms throughout the country

And now available:

Spanish/English Language Performance Screening (S/ELPS)

A measure of language dominance, designed for use by the teacher or other examiner with four- through eight-year-old children.

Working with Parents of Handicapped Children

A manual (Spanish and English versions) with a positive approach for interviewing and working with parents, designed for use by all teachers who have one or more handicapped children in the classroom.

How to Fill Your Toy Shelves Without Emptying Your Pocketbook

A manual with detailed directions for making inexpensive instructional materials for the home or the classroom, designed for use by all teachers of young children.

Supplementary Materials

Supplementary information and activities for children with learning problems, designed specifically for use with the Bilingual Kindergarten Program.

SPANISH/ENGLISH LANGUAGE PERFORMANCE SCREENING (S/ELPS)

S/ELPS provides an objective method for evaluating the dominant oral language of four- through eight-year-old children.

S/ELPS compares a child's performance in one language with his/her performance in another; it does not compare one child with others. Parallel activities are offered in Spanish and English.

S/ELPS is designed to be

- administered and scored in less than 15 minutes by any bilingual person
- used as a guide for teaching children a new language and for grouping children for classroom activities
- enjoyed by and of interest to young children and conducive to their verbal learning

S/ELPS test kit contains

- Test manual, with directions for administering and scoring, suggestions for teaching and grouping, and technical information
- Recording forms in Spanish and English
- Two special boxes:
  Box I (Spanish)
  cup, plate, spoon, comb, mirror, watch
  Box II (English)
  baby, bottle, bed, chair, table, scissors
- Four color pictures
  La piñata, El baño, Playground, Clown
- Publisher: CTB/McGraw-Hill, Del Monte Research Park Monterey, CA 93940

WORKING WITH PARENTS OF HANDICAPPED CHILDREN AND TRABAJANDO CON LOS PADRES DE NINOS CON IMPEDIMENTOS

Manuals (Spanish and English) for those with little or no formal training in working with parents of handicapped children. Topics include:

Understanding How Parents Feel
Knowing Your Own Feelings
Meeting with Parents
Following Up the Meeting

Organizations, sources of information, books, and pamphlets for teachers and parents are listed in the appendix.

HOW TO FILL YOUR TOY SHELVES WITHOUT EMPTYING YOUR POCKETBOOK AND COMO LLENAR SUS ESTANTES CON JUGUETES SIN GASTAR MUCHO DINERO

Instructions for making and using manipulative learning equipment for use with handicapped and non-handicapped young children in day care centers, classrooms, and home; and directions for planning and conducting a materials workshop. Equipment can be made by teachers, assistants, and parents or in a group workshop.

Manuals available from
The Council for Exceptional Children
1920 Association Drive
Reston, VA 22091

Working with Parents - $3.25 each
How to Fill Your Toy Shelves
English-Stock No. 130 - $3.95 each
Spanish-Stock No. 134 - $3.95 each

SUPPLEMENTARY MATERIALS FOR THE BILINGUAL KINDERGARTEN PROGRAM

Diagnostic and remedial materials have been developed to supplement the Bilingual Kindergarten Program (BKP). These materials provide a means of identifying needs and individualizing instruction for the handicapped child within the regular BKP.
The Supplementary Materials include:

Instructional Guide - How to use the supplementary materials.

Entry Level Checklists - Provide an organized method for observing each child during the first two weeks of kindergarten.

Observation Cards - For use in identifying specific behaviors in the Visual, Auditory, Motor, and ideas and Concepts lessons and to provide immediate techniques for simplifying the task or determining where skills break down.

Information Cards - Provide general information, ways of handling problems, suggestions for classroom management, and specific information on different types of handicapping conditions.

Action Cards - Provide alternate ways of teaching a task or smaller step activities for meeting and reinforcing lesson objectives.

Home Activities - Supplement classroom instruction in the Visual, Motor, Auditory, and Ideas and Concepts lessons.

Supplementary Media - Illustrate children with handicapping conditions or problems such as children with glasses, hearing aids, or braces.

The Supplementary Materials can be used by any teacher, assistant teacher, or team of teachers using the basic Bilingual Kindergarten Program (BKP). The Observation Cards, Home Activities, and Supplementary Media are keyed to activities in the basic BKP. In addition to use with handicapped children, the Supplementary Materials have also been used successfully with non-handicapped children who have difficulty in meeting objectives of the BKP curriculum.

For additional information or a sample of the materials, please write or call:

Joyce Evans, Ph.D.
Director, Special Projects or
Rebeca Zuniga, Adult Trainer
Southwest Educational
Development Laboratory
211 East 7th Street
Austin, Texas 78701

512/476-6861

Please send me a sample copy of the Observation, Information, and Action Cards.

Name _____

Position _____

Spanish/English Language Performance Screening (S/ELPS)

The Spanish/English Language Performance Screening (S/ELPS) instrument provides an objective method of evaluating the child's stronger or dominant language for initial instruction in a bilingual program. It is designed for the classroom teacher to use at the beginning of the school year so the child can be taught in his stronger language without an extended period of observation. Other examiners will find it useful for determining the better language(s) for administration of other tests.

The S/ELPS compares the child's performance in one language with his performance in the other. It does not compare one child to another nor to the rest of the children his age. Parallel, not identical, activities are included in Spanish and in English. The test takes about 15 minutes to administer and score and may be administered by any bilingual person who teaches and works with young children.

The S/ELPS is designed to be

- Useful to the classroom teacher without special training in testing
- Interesting and enjoyable for young children so they will verbalize freely
- Helpful to teachers in getting to know each child individually as well as in learning the better language for communicating and teaching
- Effective as a guide to initial teaching language and grouping of children for classroom activities
- Convenient to administer and score

THE ABILITY DEVELOPMENT PROGRAM

SUPPLEMENTARY MATERIALS FOR THE BILINGUAL KINDERGARTEN PROGRAM

The Ability Development Program is designed to supplement instruction for children enrolled in the Bilingual Kindergarten Program developed in 1974 by the Southwest Educational Development Laboratory. Materials for the Ability Development Program are designed for children with mild to moderate handicapping conditions. However, the materials can also be used as a supplement for any child, handicapped or normal, who is having difficulty in learning.

Supplementary materials of the Ability Development Program include an instructional guide, entry level checklists, a set of 5 x 8 index cards, and media. A brief description is as follows:

1. Instructional Guide - Use of the supplementary card file, as well as background information on the development of the supplementary materials is described.

2. Entry Level Checklists - Provide an organized method of observation of the child's ability to function in the preschool setting, as well as references to specific information on handling problems and classroom management.

3. Observation Cards - Designed to be used with Visual, Auditory, Motor, and Ideas and Concepts lessons of the Bilingual Kindergarten Program, each Observation Card identifies specific behaviors to observe in each lesson.

4. Information Cards - General information on types of problems which may arise and ways of handling problems, suggestions for classroom management and adaptations are described as well as specific information on different types of handicapping conditions.

5. Activity Cards - Specific activities which provide alternate ways of teaching a task, smaller step activities for meeting lesson objectives, and reinforcement activities are listed as followup instruction for observations.

6. Media - Additional media required for using the Activity cards is included. (Media from the Bilingual Kindergarten Program has been used for the supplementary activities whenever possible.)

These supplementary materials can be used by any teacher or team of teachers who are using the basic Bilingual Kindergarten Program (BKP). They are not designed to be used independently of the BKP at this time. The Card File can serve any number of children; however, no more than three or four teachers who work as a team should share a file. Both teachers and assistant teachers can make observations, follow the informational instructions, and teach the activities.

For additional information or a sample of the materials, please write:

Joyce Evans, Ph.D.
Director, Ability Development Program
Southwest Educational Development Laboratory
211 East 7th Street
Austin, Texas 78701

HOW TO FILL YOUR TOY SHELVES WITHOUT EMPTYING YOUR POCKETBOOK
and
COMO LLENAR SUS ESTANTES CON JUGUETES SIN GASTAR MUCHO DINERO

Games, activities, and instructions for making manipulative learning equipment are included in these manuals. The equipment and activities have been designed to be used with handicapped and nonhandicapped young children in day care centers, classrooms, and at home.

All items can be made from things which can be saved in the home, such as empty bottles and cans; from scraps, such as lumber and fabrics; from materials usually found in preschool centers or classrooms, such as blocks, beads, and pegboards; or from things which can be purchased in variety stores. Instructions for constructing several types of equipment, ranging from adult instructional aids, such as a felt board, to activities and games for children are included. All items are adaptable for small group or individual use. The equipment can be made by individual teachers, assistant teachers, and parents, or in a group workshop.

All instructions were tested by teachers and parents during a materials workshop. Directions for planning and conducting a similar materials workshop are detailed. Materials to be collected or purchased and the necessary tools and supplies are listed along with suggestions for arranging the workshop space into specific work areas.

Activities for using each item with children follow the directions for making equipment. Activities are included for developing skills in the following areas: Visual, Auditory, Gross Motor, Fine Motor, and Language and Concept Development.

These manuals were developed as a part of the Ability Development Project of Southwest Educational Development Laboratory and funded by a grant from Bureau of Education for the Handicapped.

The manuals are available from:

The Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091

Stock No. 130 - English Version
Stock No. 134 - Spanish Version
$3.95 each

Joyce Evans, Ph.D.
Director, Special Projects
Southwest Educational
Development Laboratory
211 East 7th Street
Austin, Texas 78701

August 1976

WORKING WITH PARENTS OF HANDICAPPED CHILDREN
and
TRABAJANDO CON LOS PADRES DE NIÑOS CON IMPEDIMENTOS

Practical considerations and suggestions for working with parents of children with existing and/or potentially handicapping conditions are the focus of this manual. Written for those who have had little or no formal training in working with parents of handicapped children, the manual is particularly useful for day care, Head Start, and elementary school teachers.

Information on feelings and attitudes which may be encountered, specific suggestions on planning for meetings with parents, and guidelines for developing referral information and files are included. A "question and answer" format is followed in addressing critical situations and questions frequently asked by teachers and preschool staff. Major topics included are: Understanding How Parents Feel, Knowing Your Own Feelings, Meeting With Parents, and Following Up the Meeting.

Sources from which teachers and parents may obtain additional information related to specific types of handicaps are provided in the appendices. Bibliographies include: General Information and Activities, Personal Narratives, and Suggested Readings on the Handicapped. In addition, sample forms and suggestions for conducting parent interviews are included.

Working with Parents of Handicapped Children was developed as a part of the Ability Development Project, funded by a grant from the Bureau of Education for the Handicapped. The manual is available in English or in Spanish (Trabajando con los padres de niños con impedimentos).

The manuals may be ordered from:

The Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091

Stock No. 132 - English Version
Stock No. 133 - Spanish Version
$3.25 each

Joyce Evans, Ph.D.
Director, Special Projects
Southwest Educational
Development Laboratory
211 East 7th Street
Austin, Texas 78701

August 1976

OBSERVATIONAL CHECKLISTS FOR REFERRAL
(Field Test Version)

The Observational Checklists for Referral (OCR) are being developed as a guide for teachers and assistant teachers of young children. The OCR helps teachers identify problems that interfere with learning, make appropriate referrals to other professionals, and communicate with parents and professionals.

The OCR includes an informational manual for the teacher, a General Checklist to be completed for each child, and Specific Checklists to be completed only for children identified on the General Checklist. Items on the General Checklist are designed for initial identification purposes. Stated in broad terms, these items cover common physical or behavioral symptoms of problems. Each item on the General Checklist relates to one or more Specific Checklists which describe unusual behaviors or physical symptoms in greater detail. The Specific Checklists represent the areas of Health, Vision, Hearing, Speech and Language, Motor, Learning, and Behavior, and provide information about the child which leads to referral and a more comprehensive evaluation by other professionals.

The OCR manual includes detailed instructions for completing each checklist, a general discussion of each Specific Checklist and the problem area it is designed to identify, descriptions of common behavioral manifestations of those problems, and guidelines for making and following up referrals. Observational skills and techniques are explained, as well as descriptions of the specific behaviors the teacher should note.

The OCR has been pilot tested by teachers and assistant teachers in Head Start and Day Care Centers, and has been reviewed by a team of external consultants representing the fields of Speech Pathology, Audiology, Early Childhood, Special Education, and Nursing. A research study comparing teacher-administered OCR results with screening evaluations performed by SEDL staff and external specialists (clinical child psychologist, educational diagnostician, speech pathologists, audiologist, pediatrician, and nurses), has been conducted. Feedback from users, reviews by external consultants, and research data have provided the basis for this Field Test Version of the OCR.

Joyce Evans, Ph.D.
Director, Ability Development Program
Southwest Educational Development Laboratory
211 East 7th Street
Austin, Texas 78701

August 1976